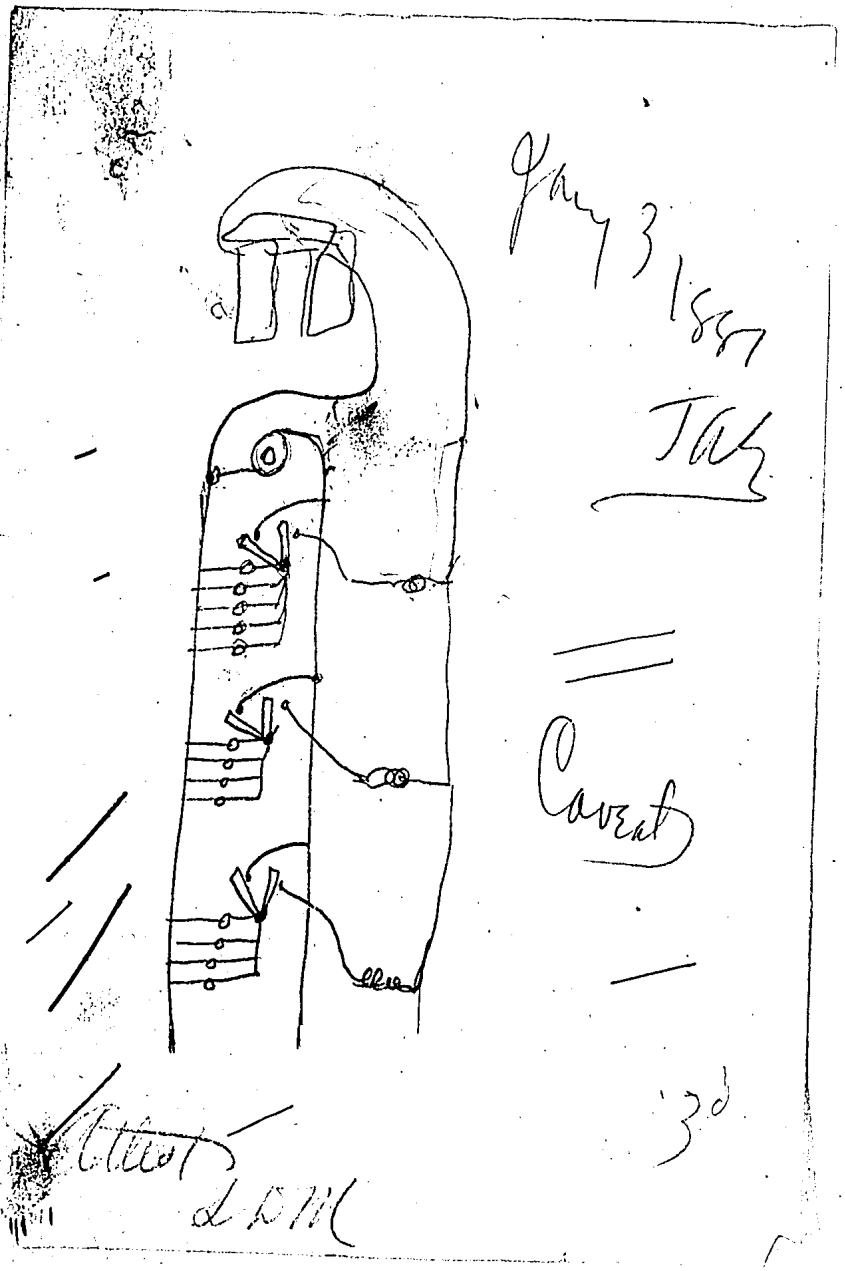
Technical Scrapbook, Cat. 1147

This scrapbook covers the period January-December 1881. The entries are by Edison and relate primarily to electric lighting. Included are notes and drawings concerning lamps, generators, meters, regulators, electric power distribution, and other parts of the system. There is also some material pertaining to arc lights, electric railways, and ore milling. Many of the entries contain notes by Edison to Richard N. Dyer, his patent attorney, and to Samuel D. Mott, his patent draftsman. Mott's name also appears as a witness on many of the documents. The case number of Edison's patent application has been written on some of the items.

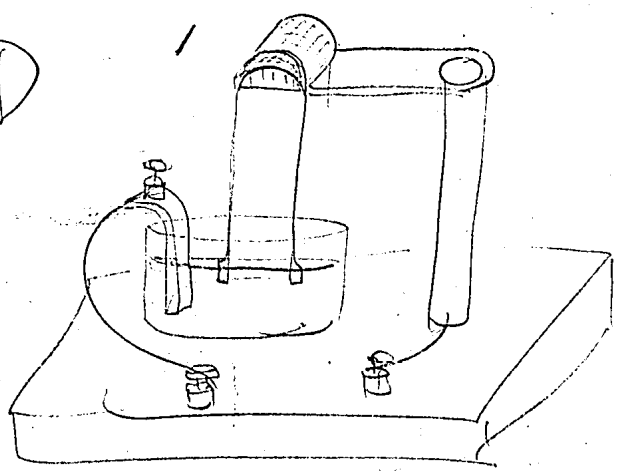
January. 1881



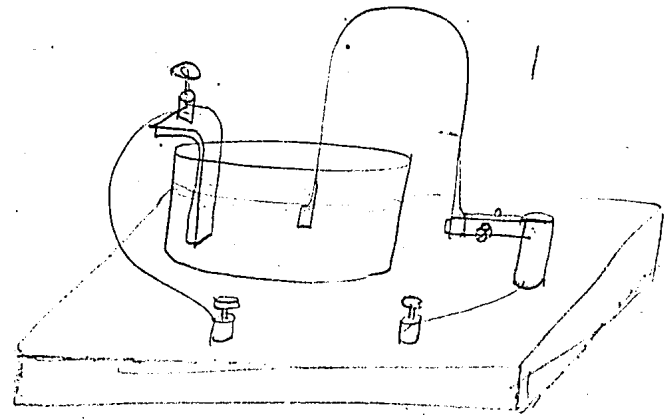
Jany 3 1881

Caveat

3d

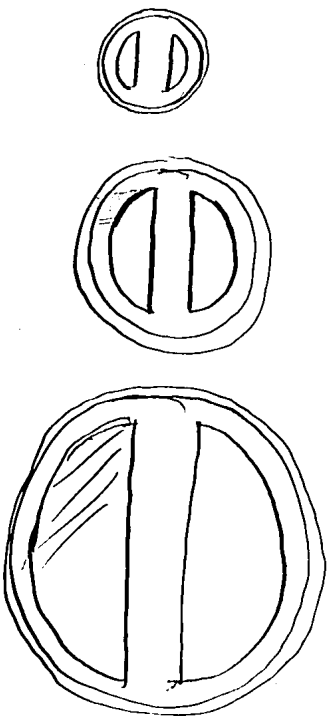


Filed Jan 11, 81.



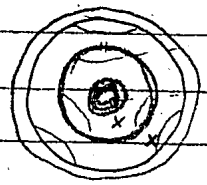
Filed Jan 18

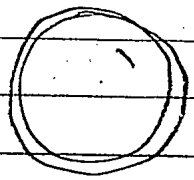
Feby 5 1881
Tas

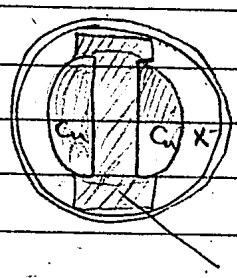


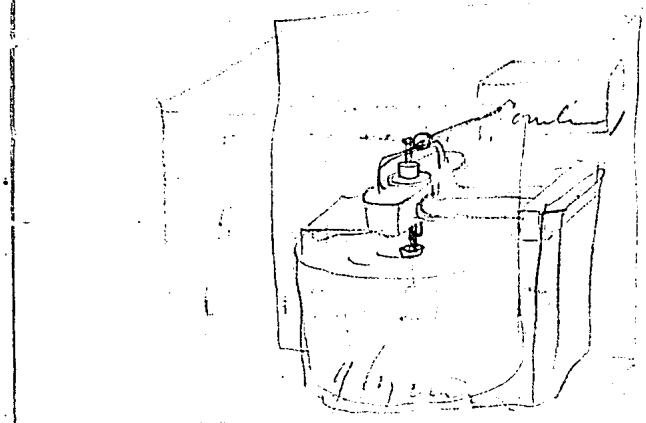
— February 1881, —

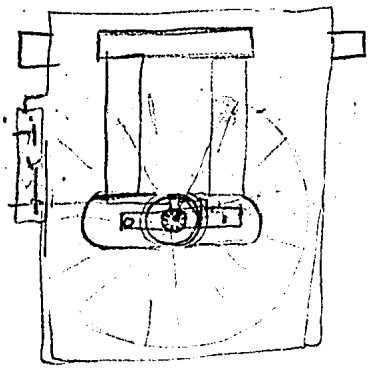
Feby 7 1881

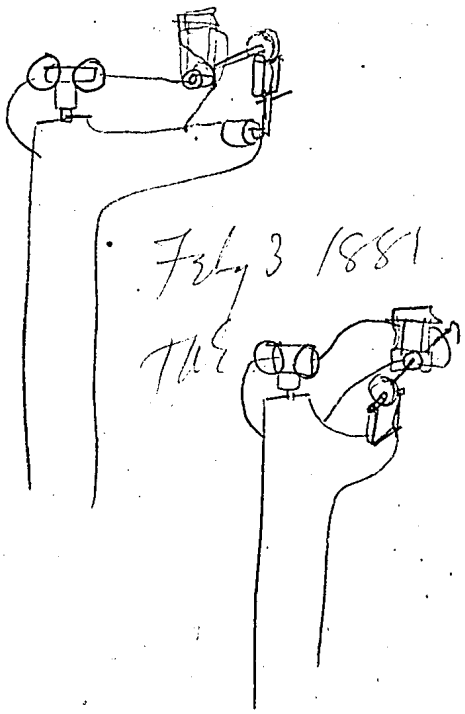











Feb 3 1881

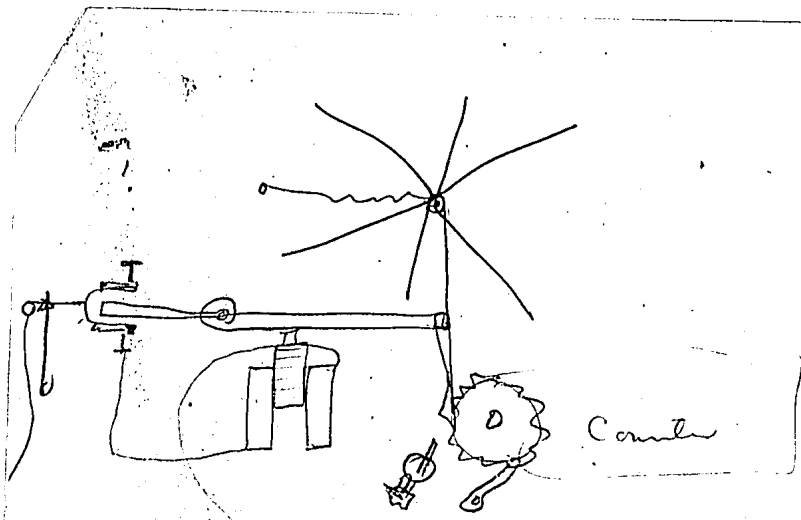
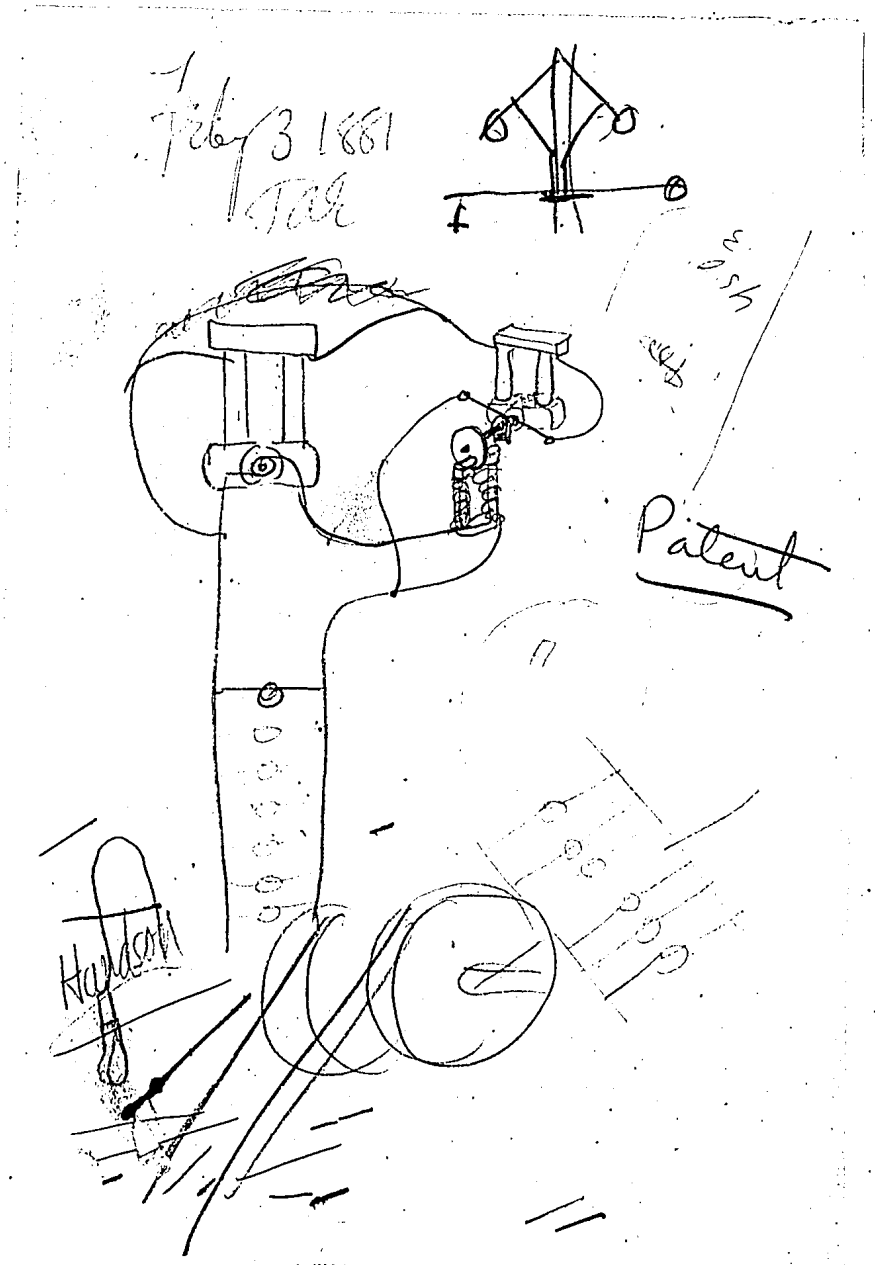
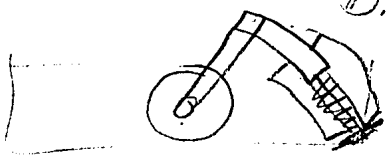


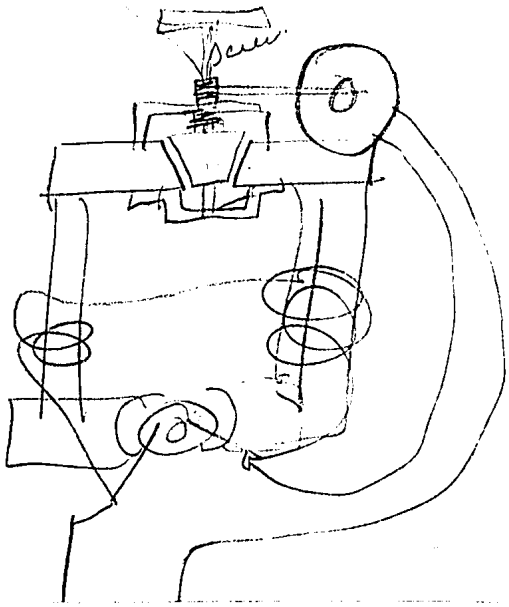
Fig 1 1881年式


Feb 3 1881
Patent
Hudson

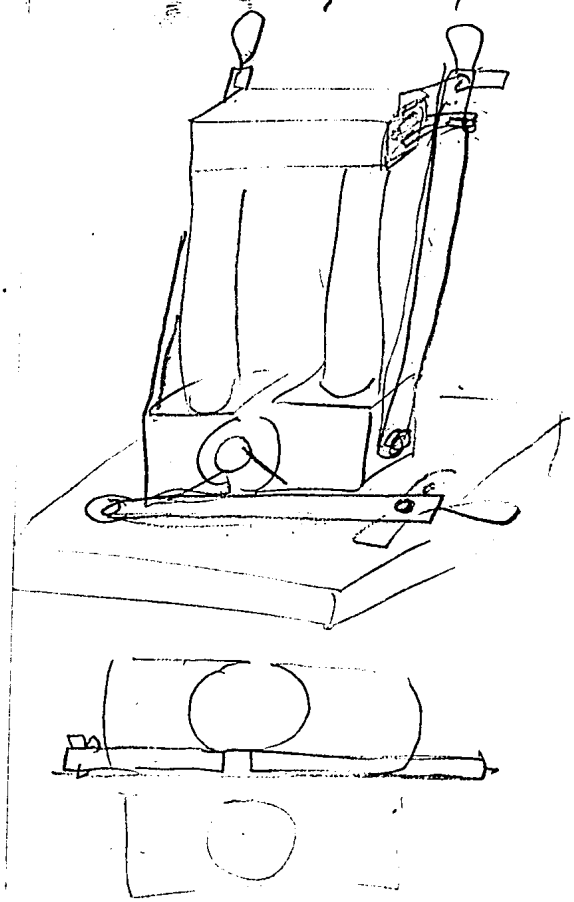
March 9. 1881

D. F. Hill



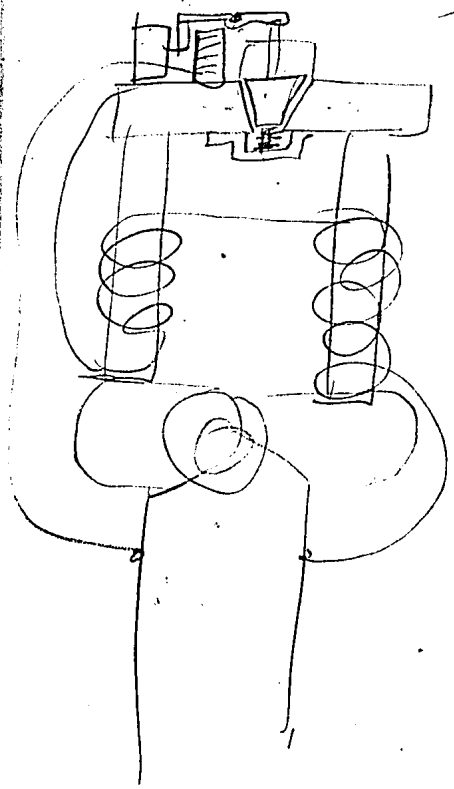


March 9 1887



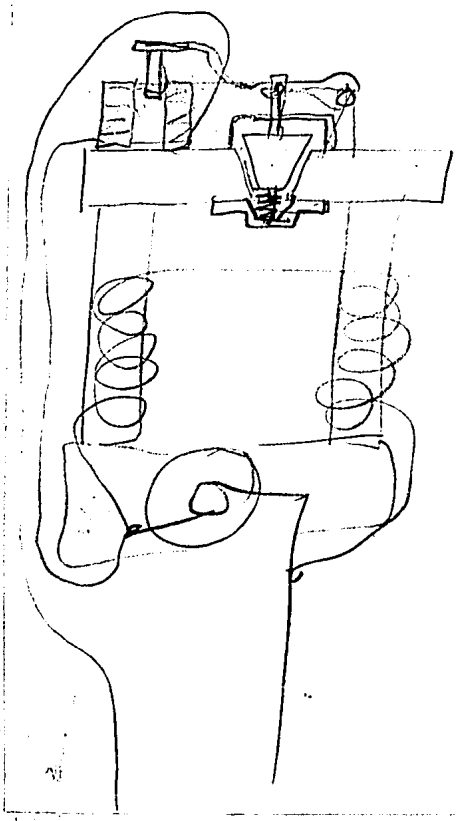
March 9. 1881

Stillwell

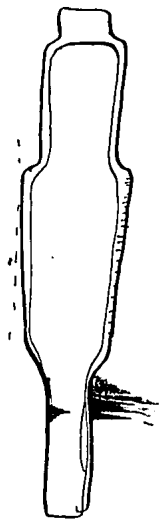


March 9, 1881

S. D. Mott



March 10 1881



The Edison Electric Light Company,

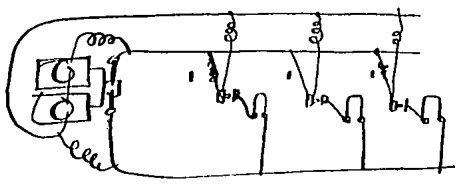
65 Fifth Avenue,

Norvin Green, Pres.
S. B. Eaton, Vice-Pres.
E. P. Fabbri, Treas.
C. Goddard, Sec'y.

New York,.....188

Mch 14 1881

Tar

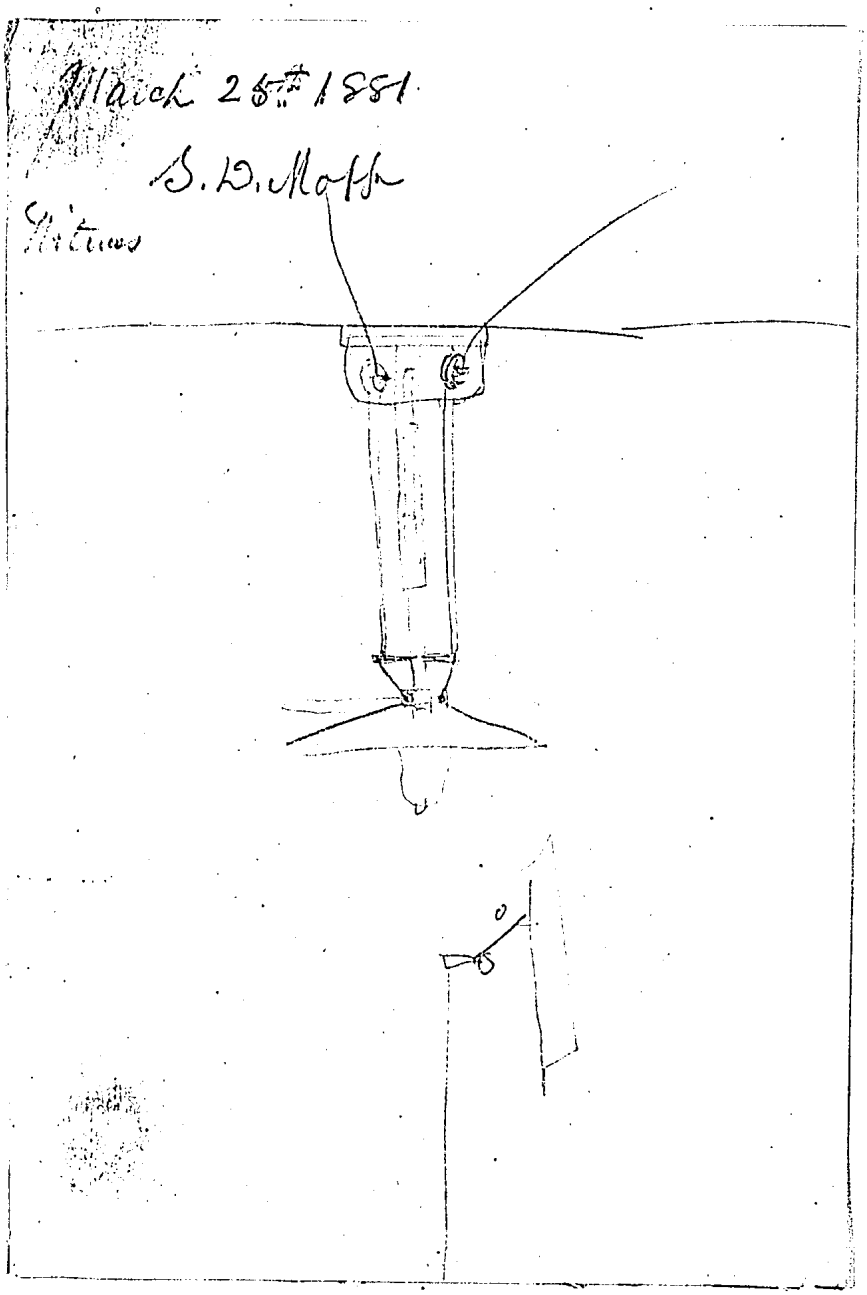


March 1881

March 25th 1881

S. D. Moffett

Witness



Case 302

Figure 1

a b c

Figure 3

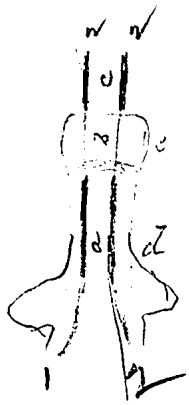


Figure 4

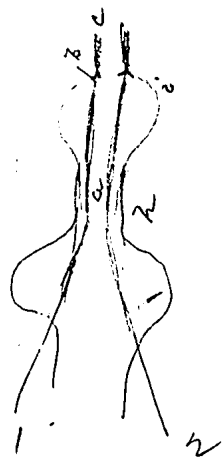


Figure 2

a b c

Citing

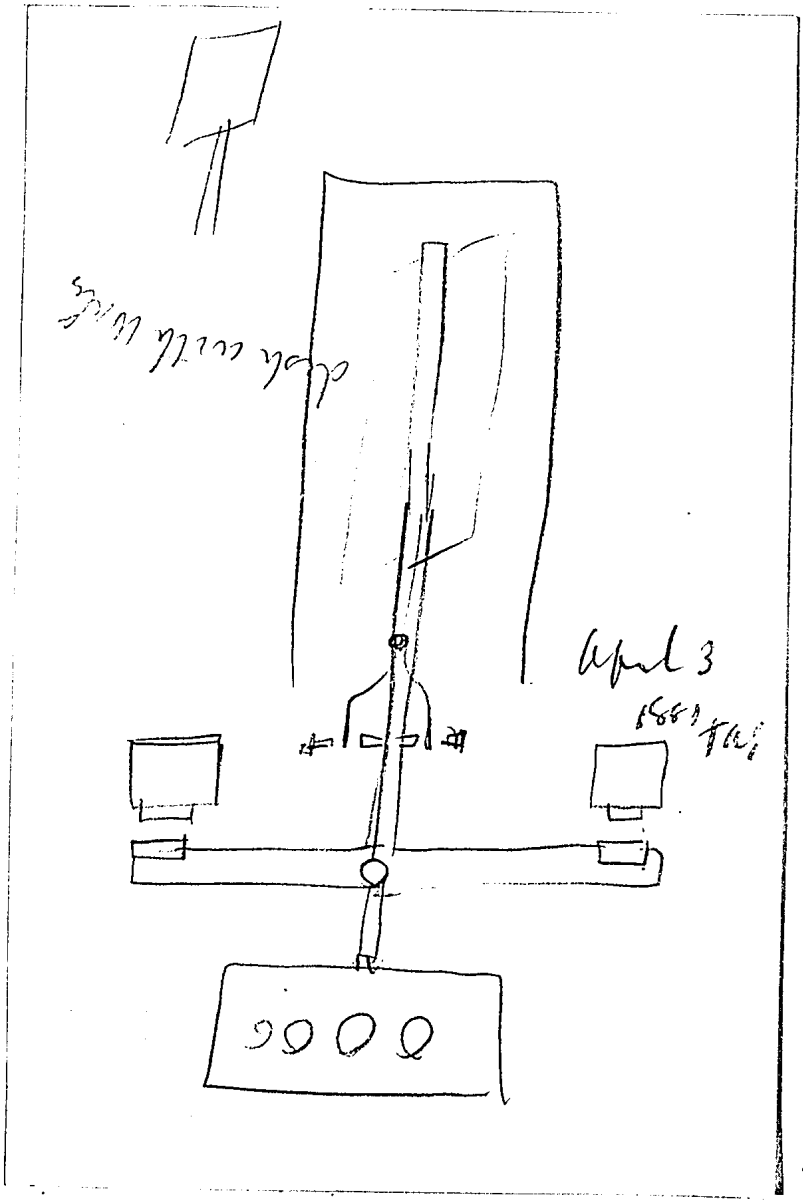
S. D. Mc H

MAR 30 1881

MAR 30 1881

MAR 30 1881

— april — 1881 —



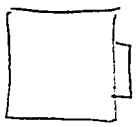
The Edison Electric Light Company,

65 Fifth Avenue,

Pres.
Co-Pres.
Treas.
Sec'y.

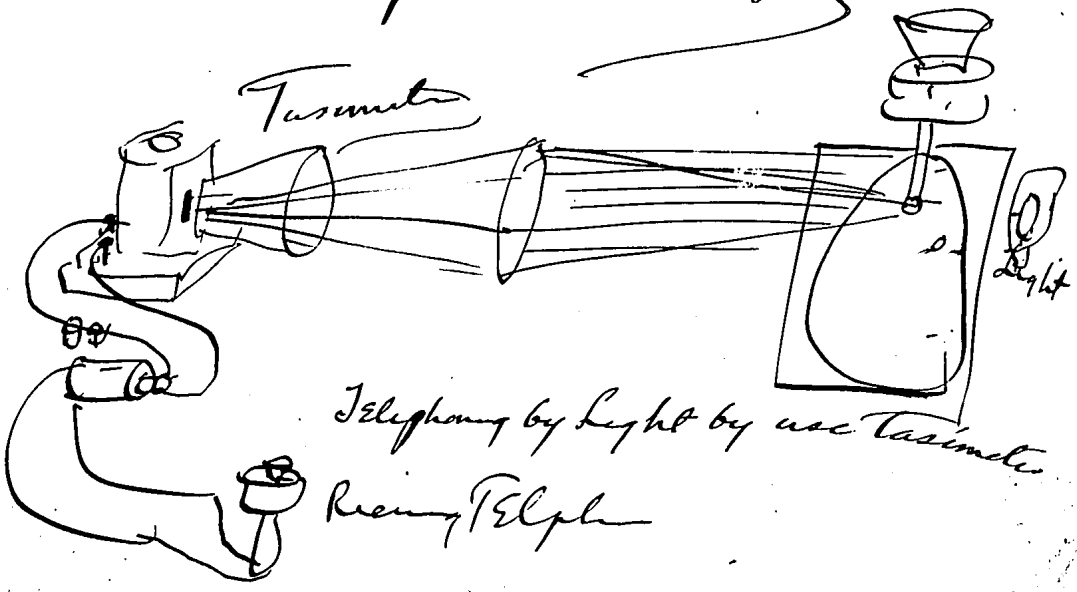
12

New York,.....188



April — 1881

April 5 1881 TAS

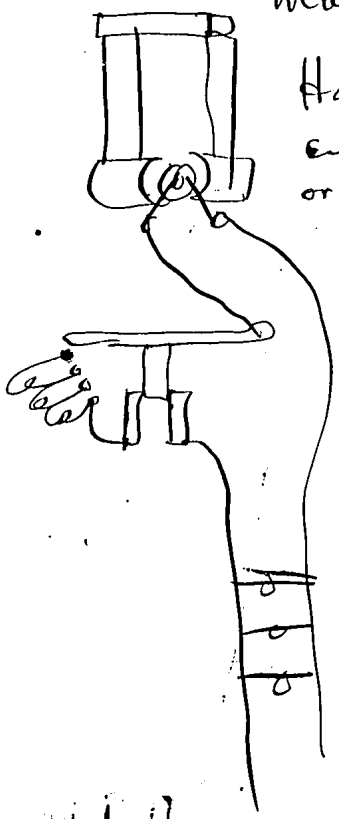


Telephony by Light by use Tasimeter

Receiving Telephone

Matt=

Have I their
letter in patent
or in Caveat



April 4th 1881

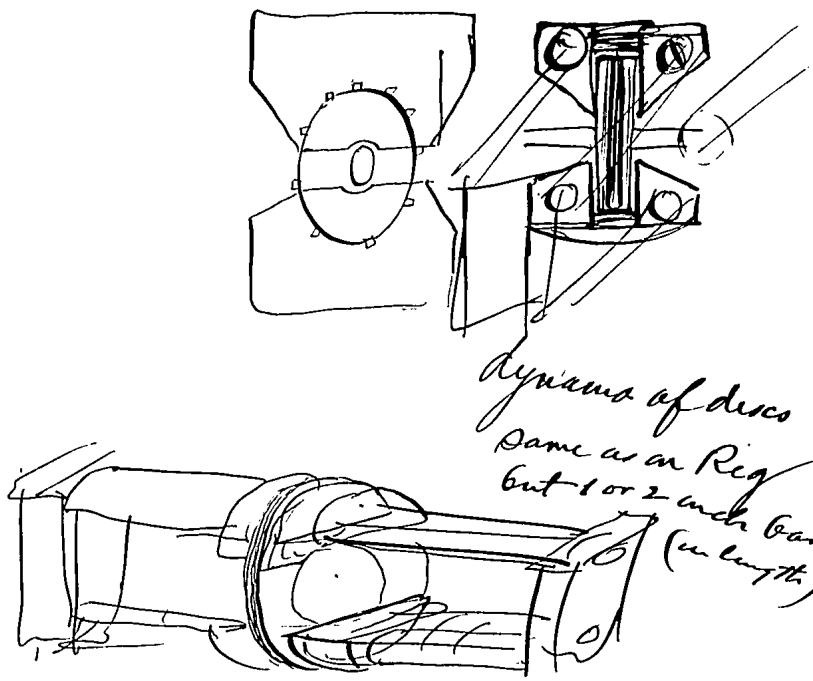
S. D. Mott

The Edison Electric Light Company,

65 Fifth Avenue,

Norvin Green, Pres.
S. B Eaton, Vice-Pres.
E. P. Fabbri, Treas.
C. Goddard, Sec'y.

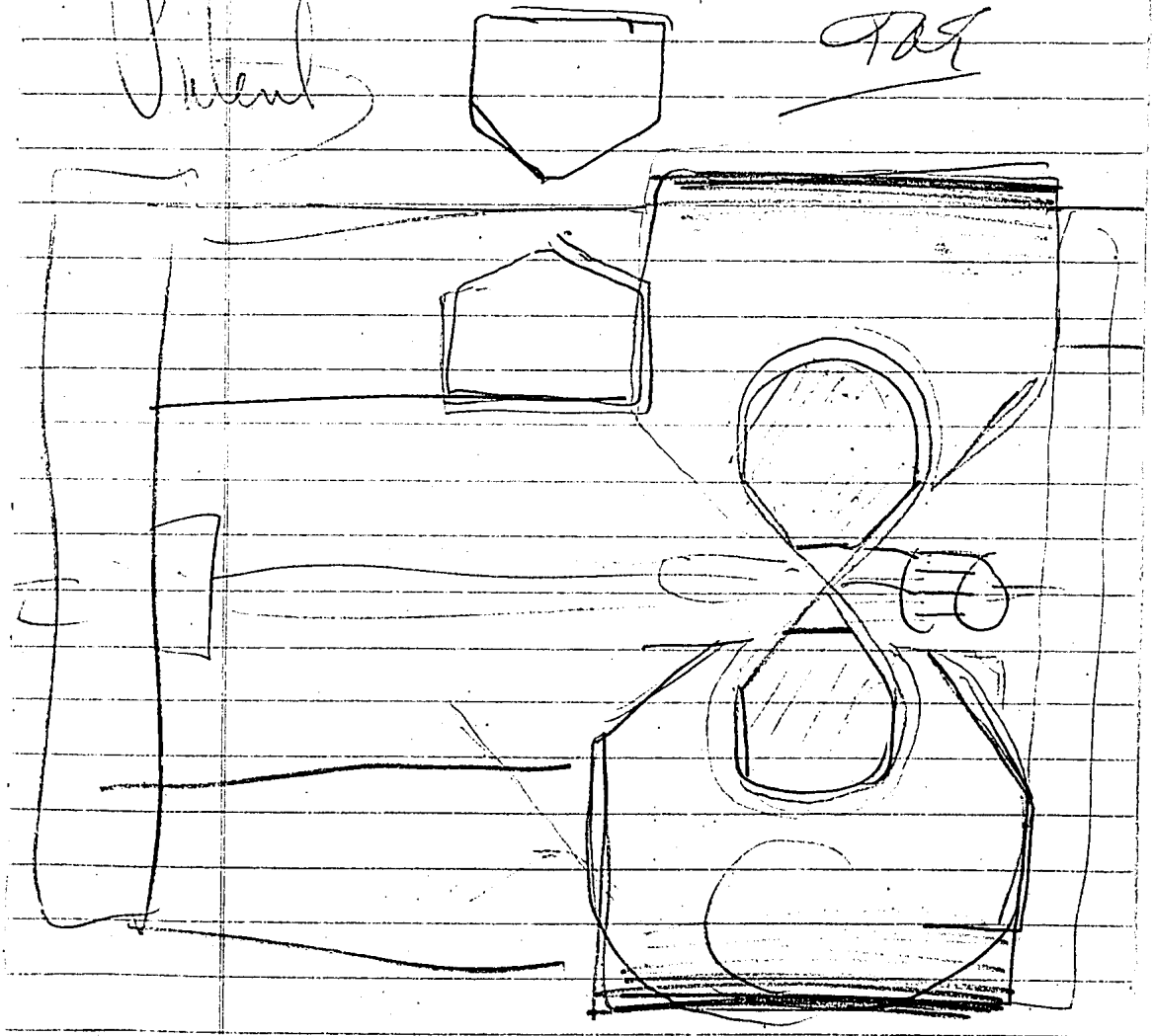
New York,.....188



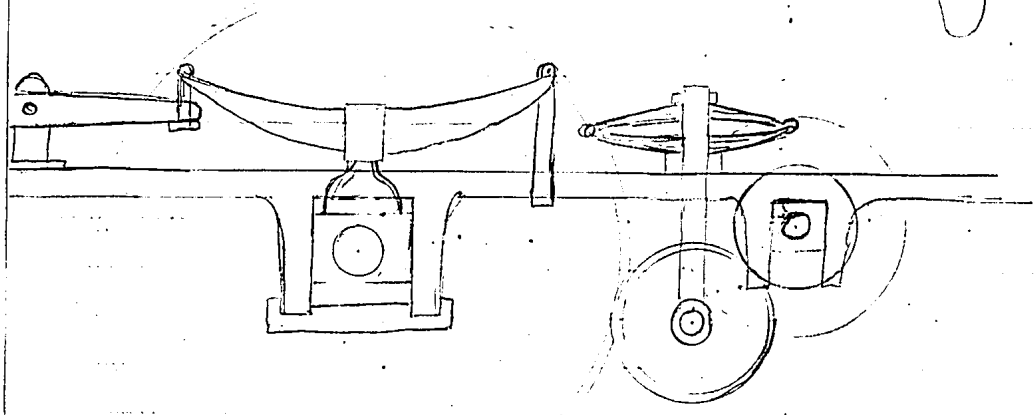
April 13 1881

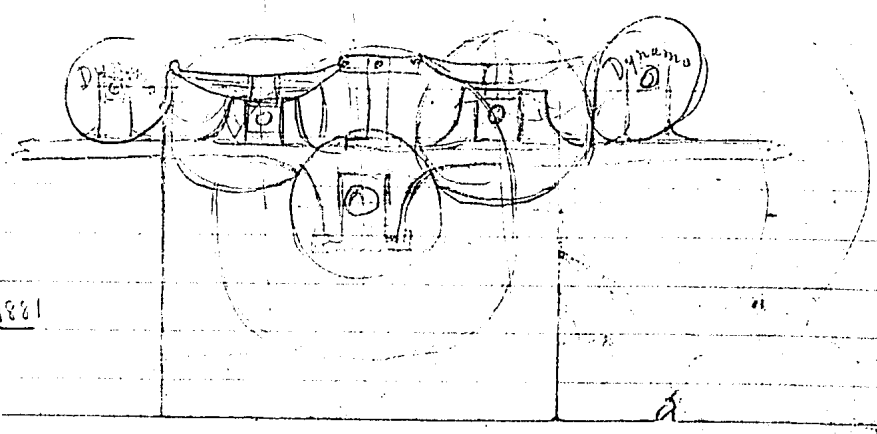
April 13 1881

Friend



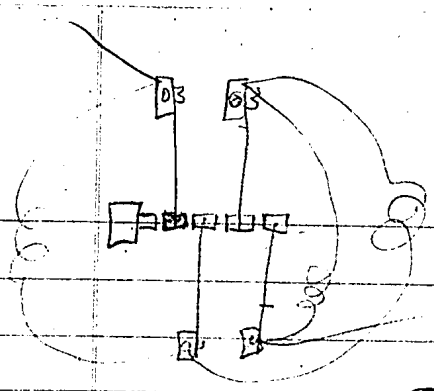
New York, _____ 187

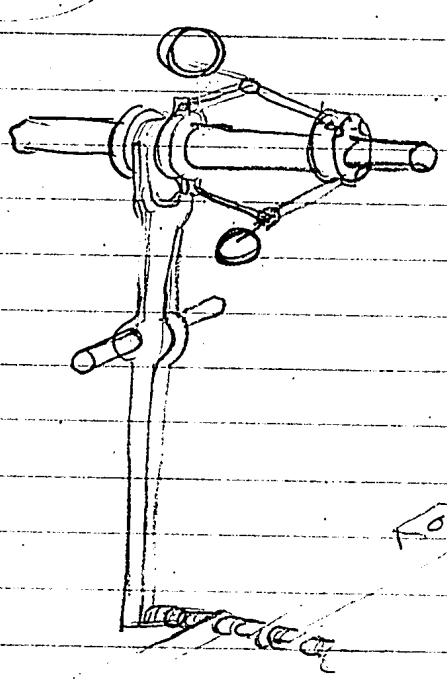




18 1881

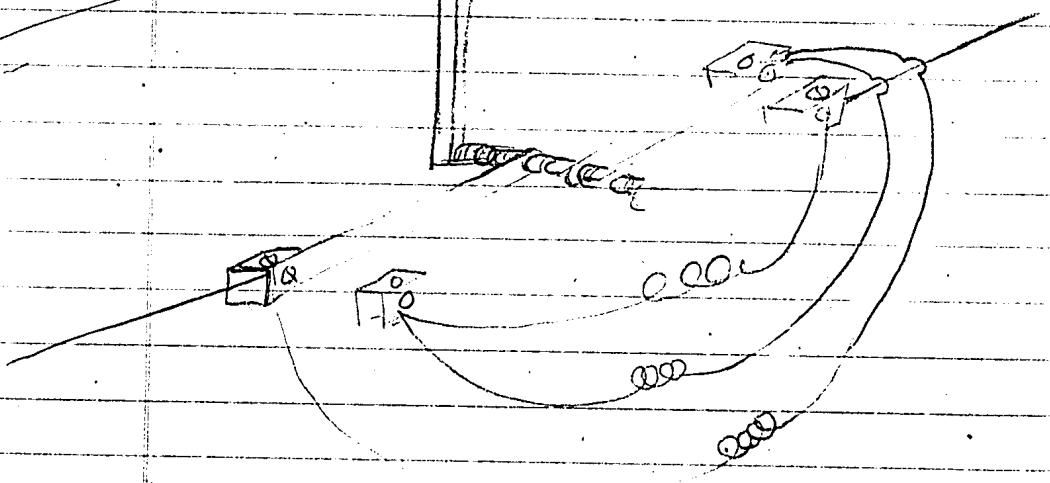
Matt=

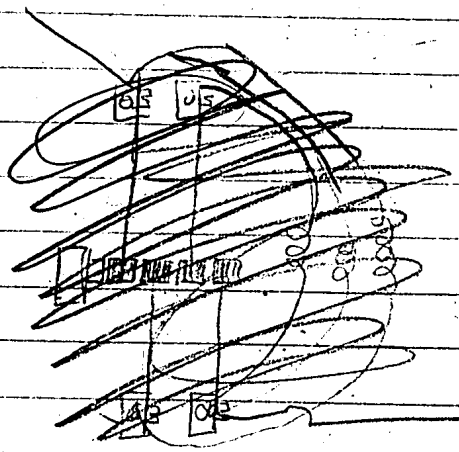


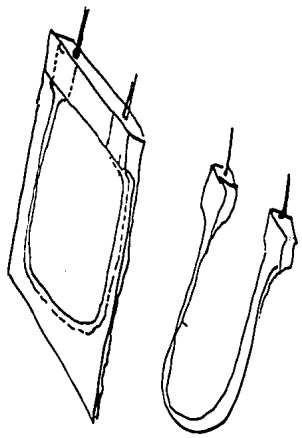


April. 13
1881
Tat

Palm



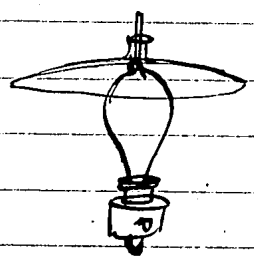


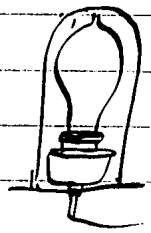


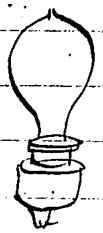
plumbago

April 19 1881

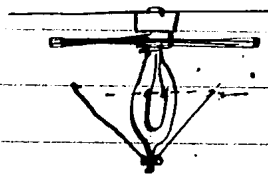
April 1881

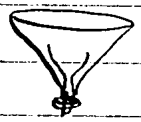


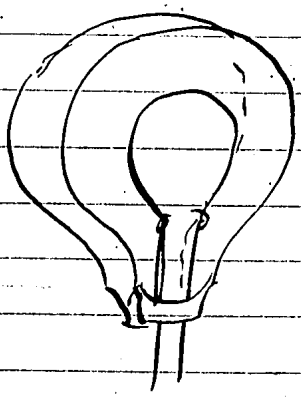




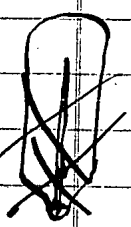
frosted globe - April 19 1881 TAE

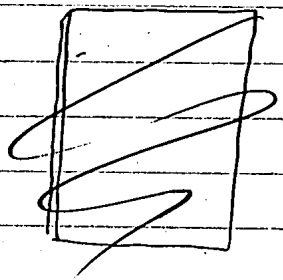






flat glass blown in mould



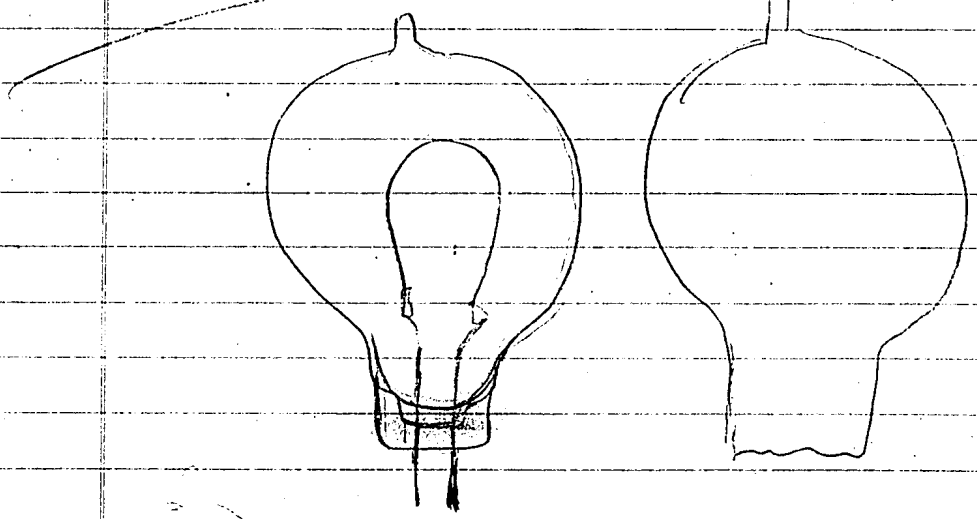


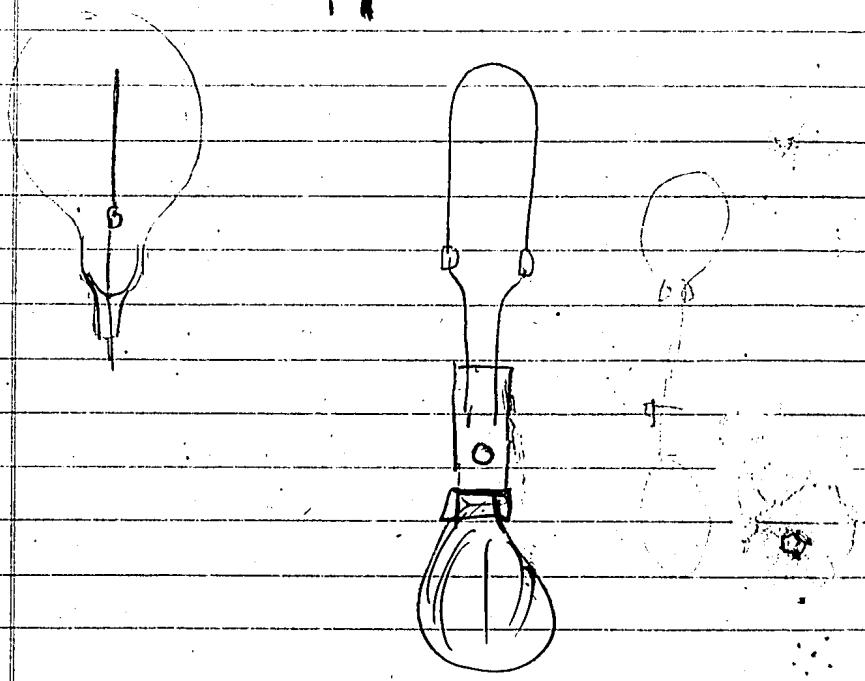
April 20 1881

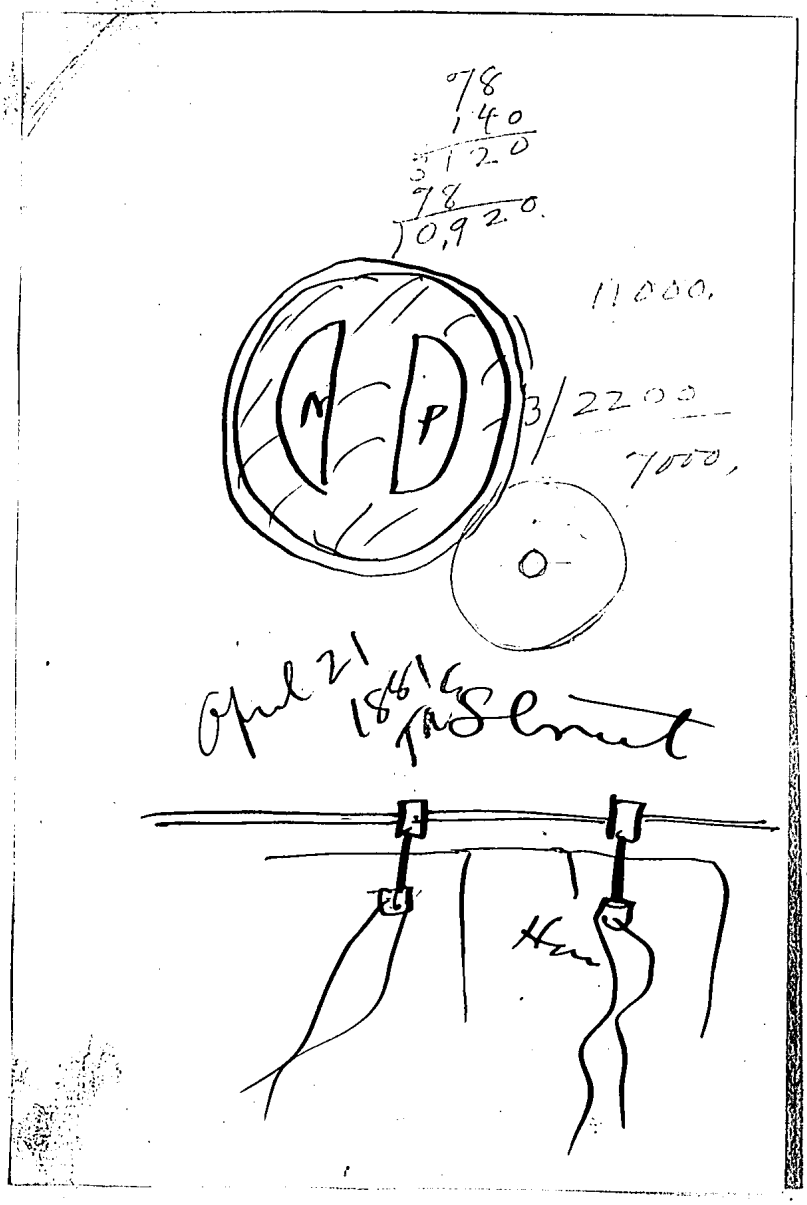
Mott

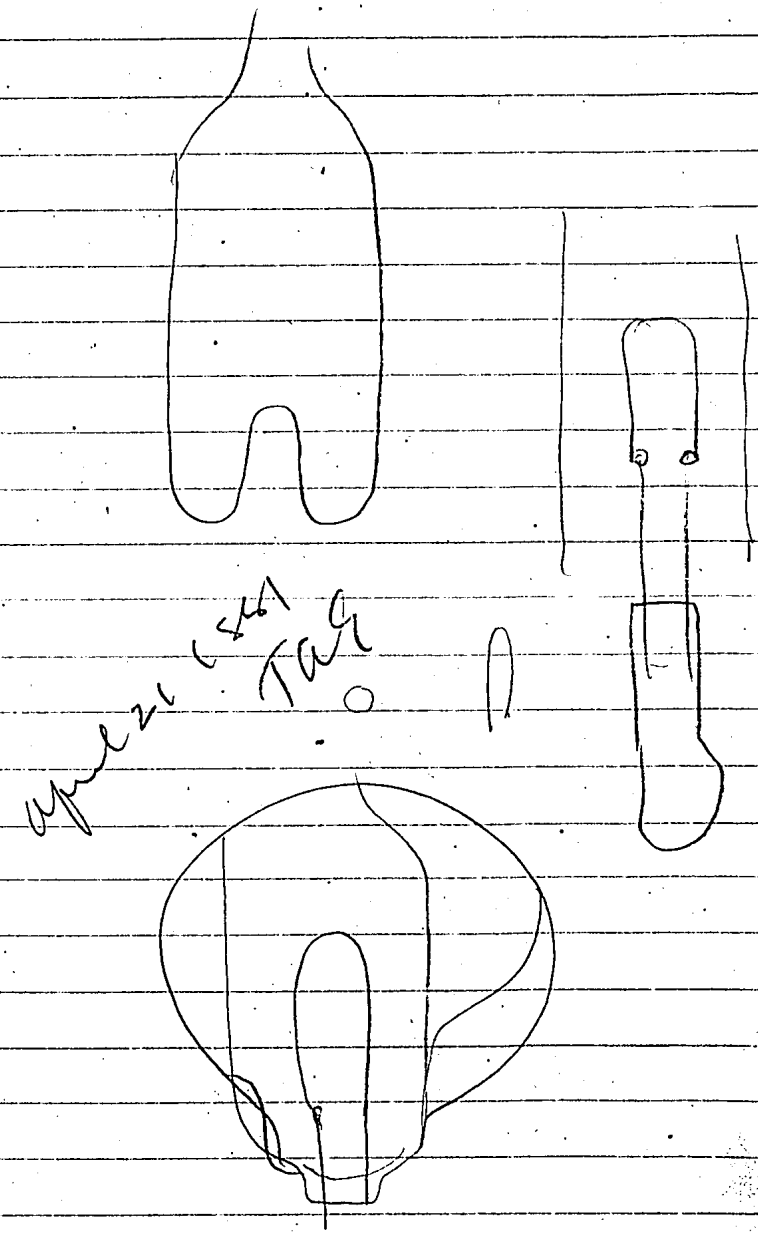
Witness
S. D. Mott

Patent

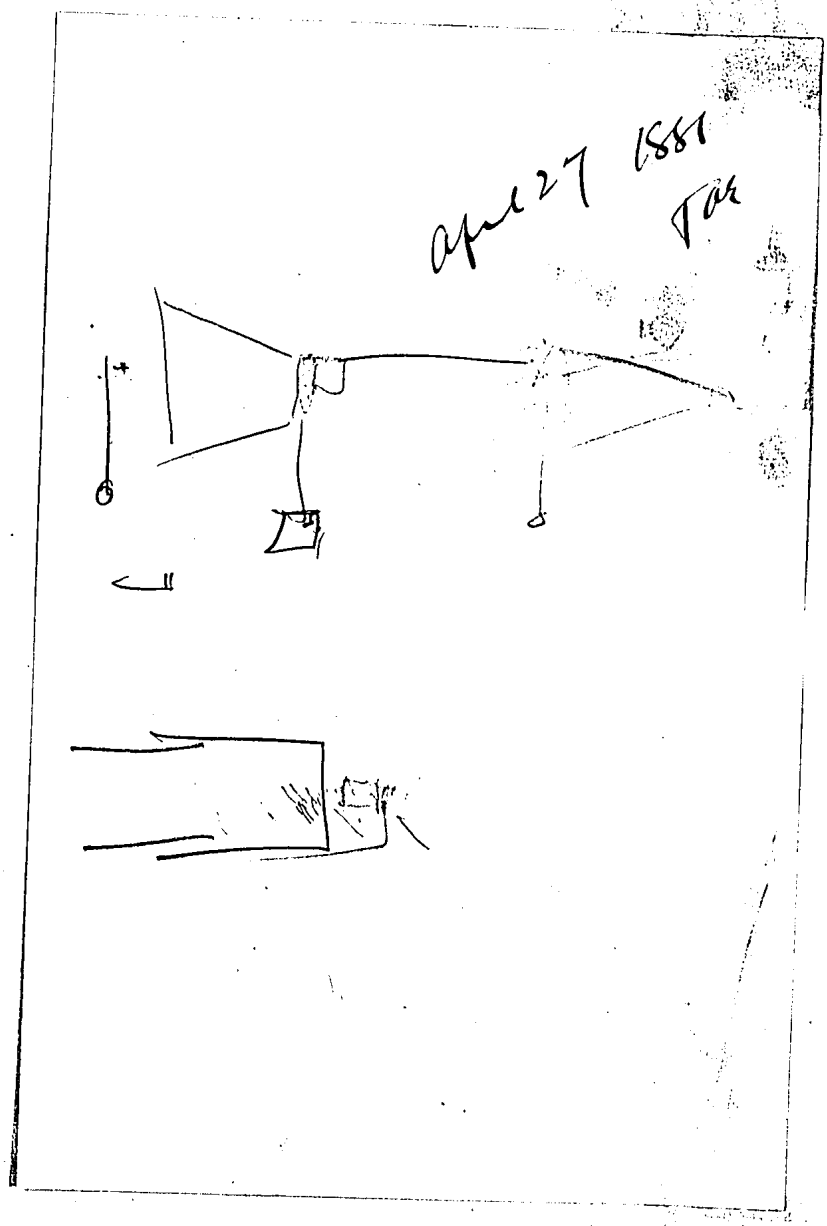





78
140
120
78
10,920.
11000.
3/22000
7000.
N
P
O
April 21 1846
Test
Hem



Chautauqua
April 21
1881
Tues.


apr 27 1881

April 27 1881 TAE

Matt Make this
for patent =

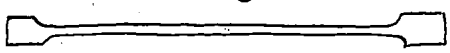


fig 1

fig 2

The filament is
broader than it is
thick

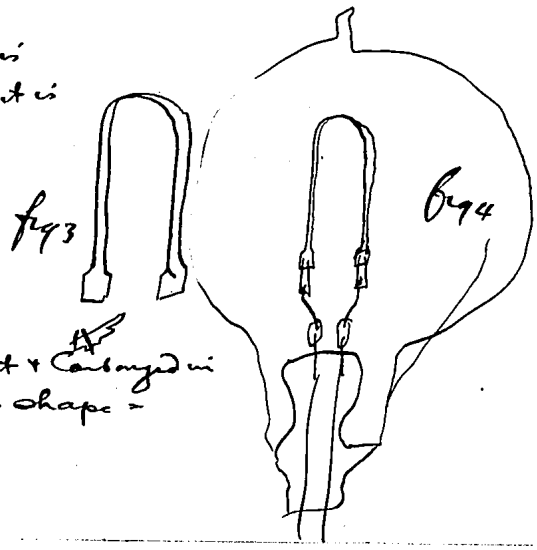
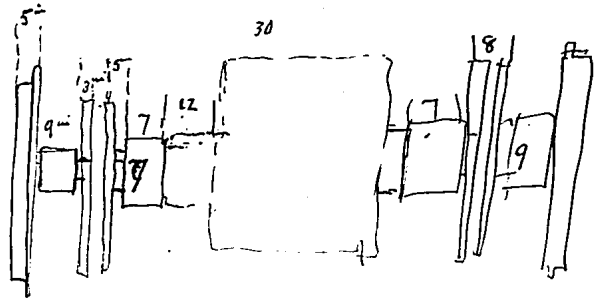


fig 3

fig 4

Bent & Carbonized in
this shape =

Electoco
April 27 1881 Tag



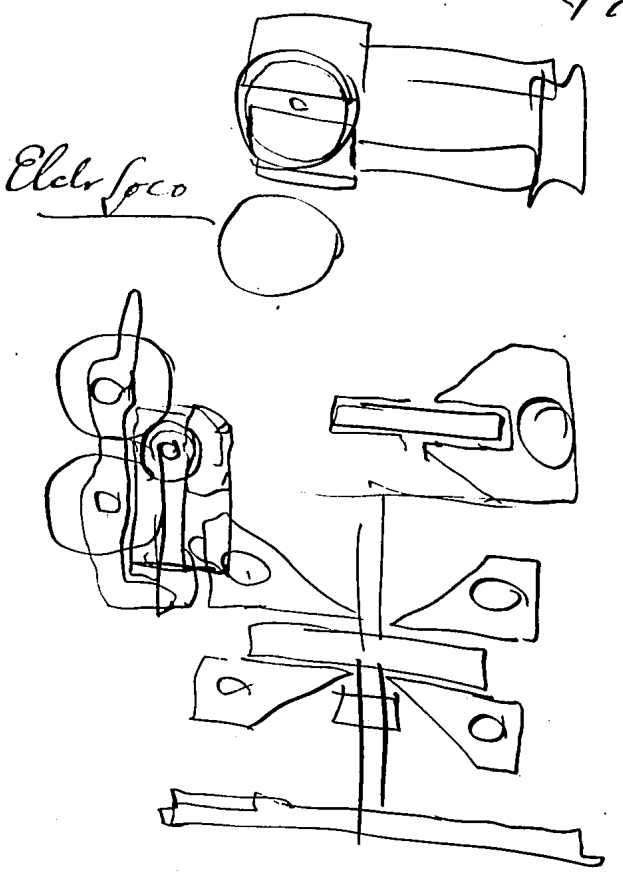
87
18
69
13
56

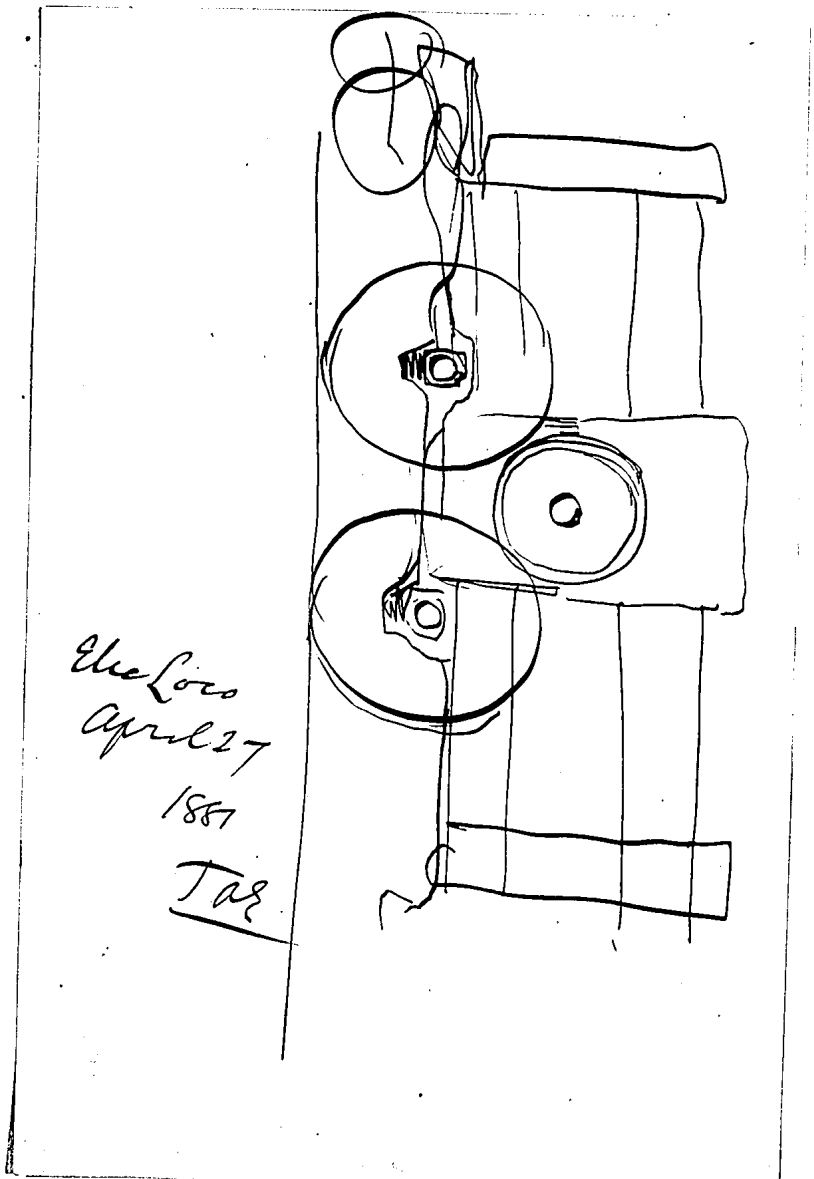
54.

9
8
7
30
12
7
5
9
12) 87 (

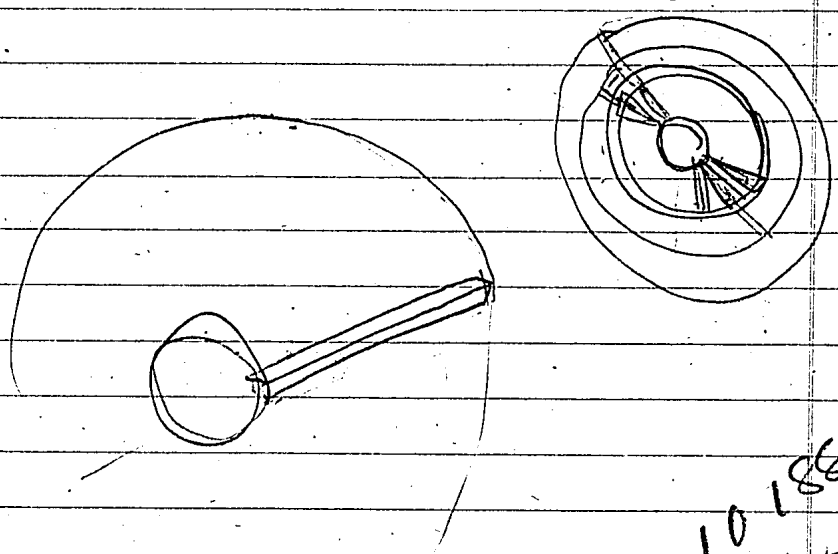
7.

April 27 1881
Tue

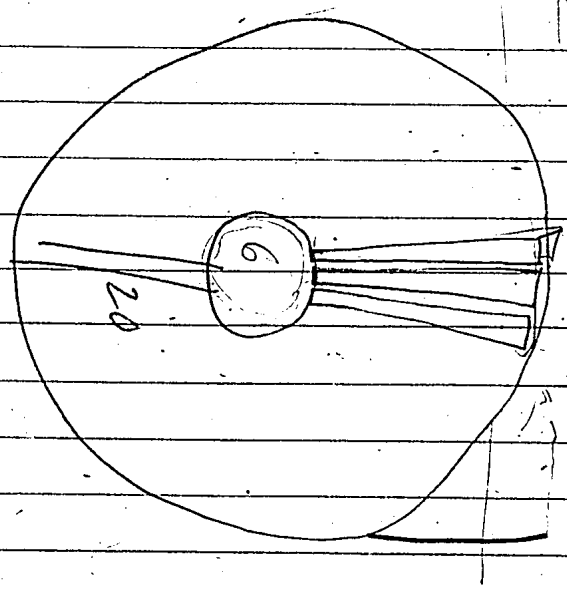




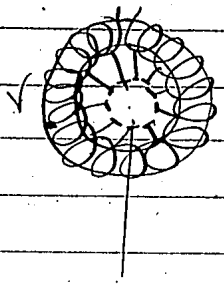
Elec Loco
April 27
1887
JAR

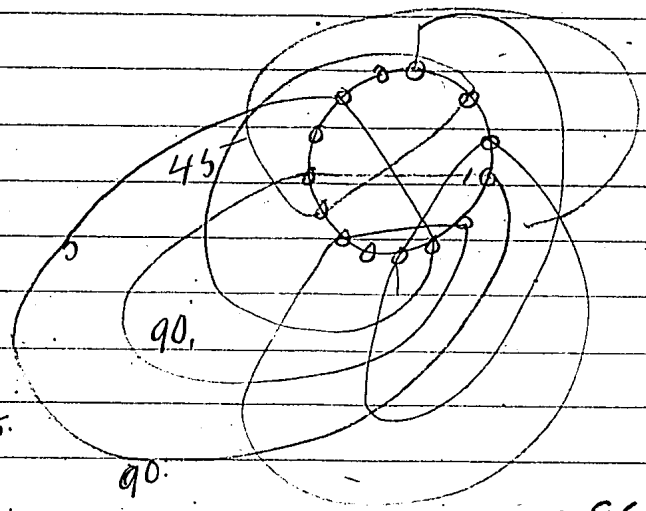


May 10, 1861



1/4





006.

45
6
270. 45.

90.

27/180.

May 10 1881

Tue

45
4
180
2
360
2
720
2
1440
2
2880.

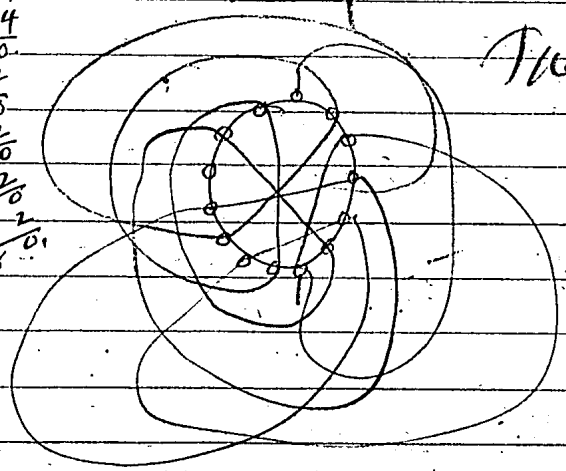
6 1/2

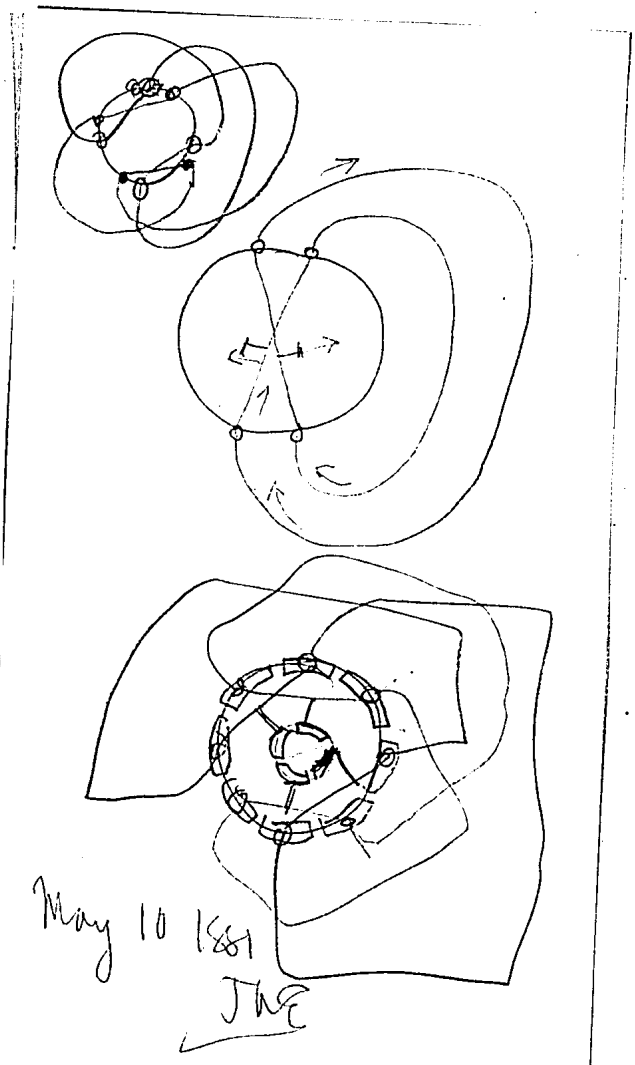
3 1/4

1.62

.81

40

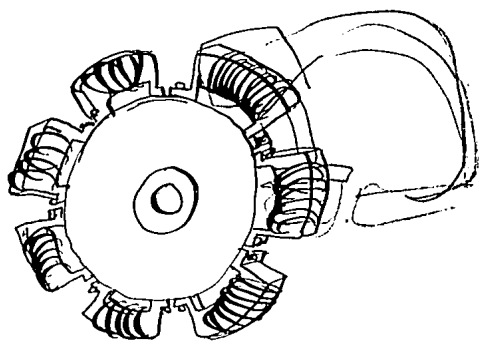




May 10 1981

JWE

May - 1881



May 10 1881
Tak

Ground Glass Lamp Shade

from Holzer May 16 1881

T.A.E.

Put burning at 6 P.M. 18th

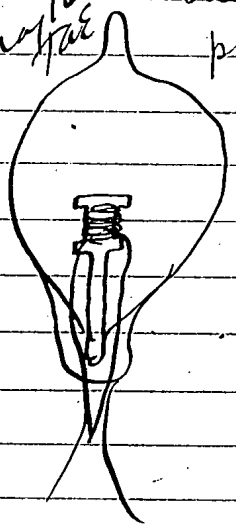
May 1881 T.A.E.

Upton to have following made —

Order given to Upton May 16 1881

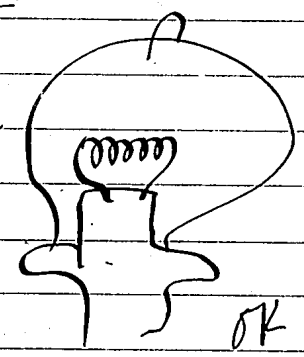
Ask Upton if he has started

Moulding brass plumbago plates for Carbonizing —



Sample as in Case 176 ~ patent 227.229.

get 3 or 4 —

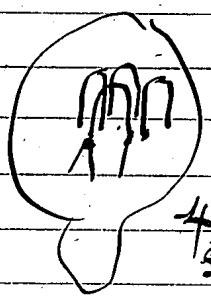


Spiral Bamboo

also some with thread & dumbbell & [illegible] rolled on —

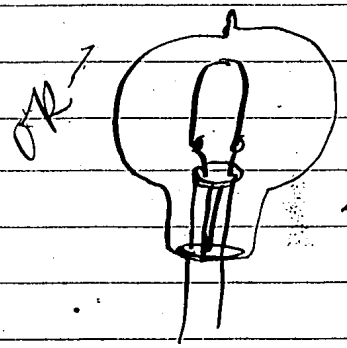
also 2 with single thread = not put in spiral form —

Make (2) Lamps

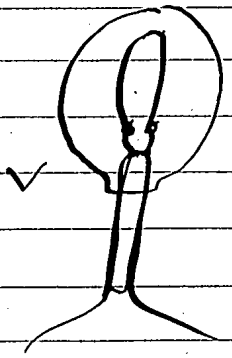


4 Carbons B size in Series —

also lamp 4 B Carbons in Multiple arc

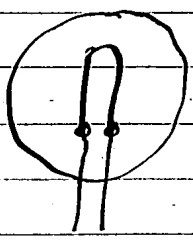


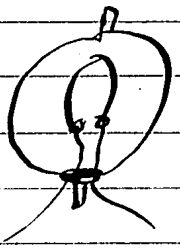
2 of these =

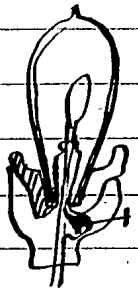


1 of these

1 Each =

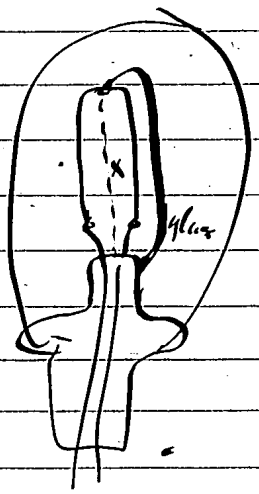




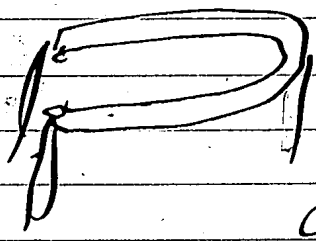


Impt

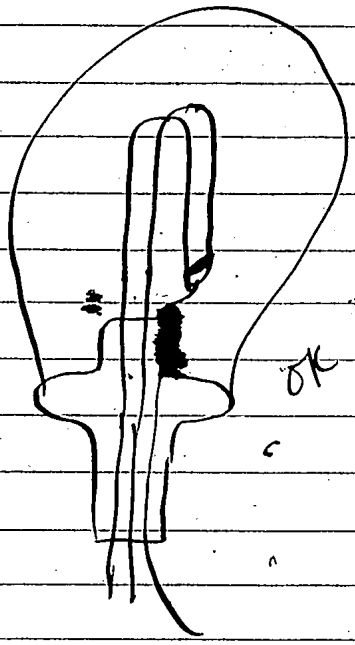
1 of these



1 of these.
1 like X -



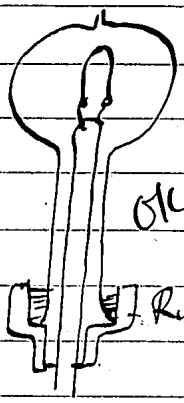
Vacuum Expts
on Carbon loops
Coating +
Carbonizing
get the plot onto disk.



Right angles. Caibans & in series.

OK

C

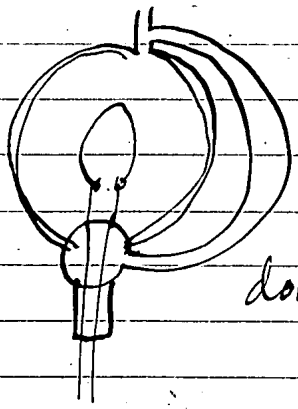


OK

2 of this

OK

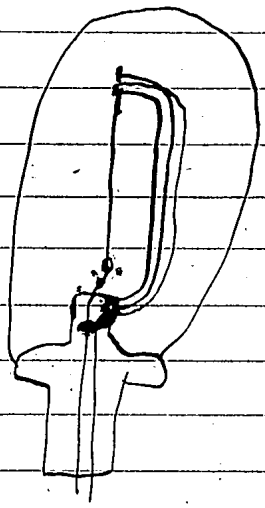
Rubber



OK

1 of this

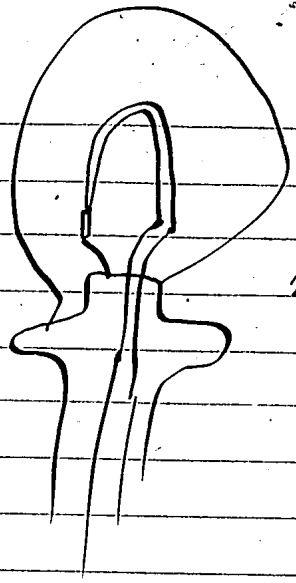
double seal



OK

OK

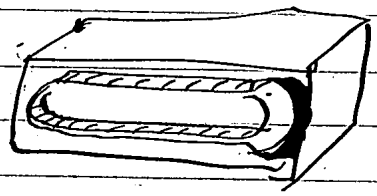
2 of these



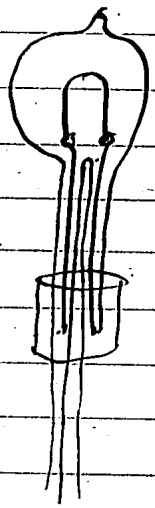
2 of these,

Get some Carbons with Lignum Vitæ Ends or also Nickel Mould where this kind of carbon was bent & Carbonized,

get lot of the wood Carbons & Blanks

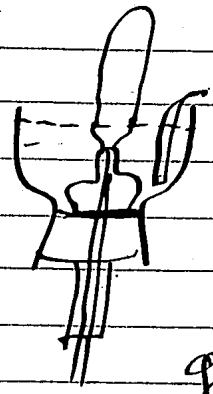


Sand blast



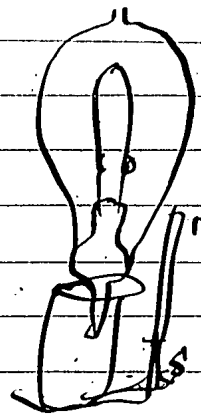
Large Lamp
Column Hg Seal

Save all those moulds where we Carbonized fibres of diff shapes. Etc

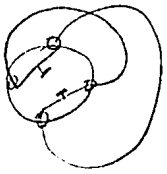


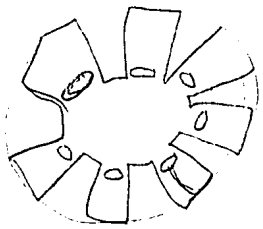
one of these

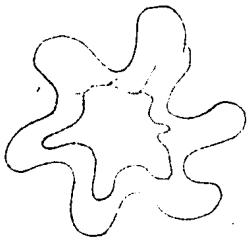
Get some of the lamps with one side of the carbon thicker than the other also some of the carbons this is important -



or one of these

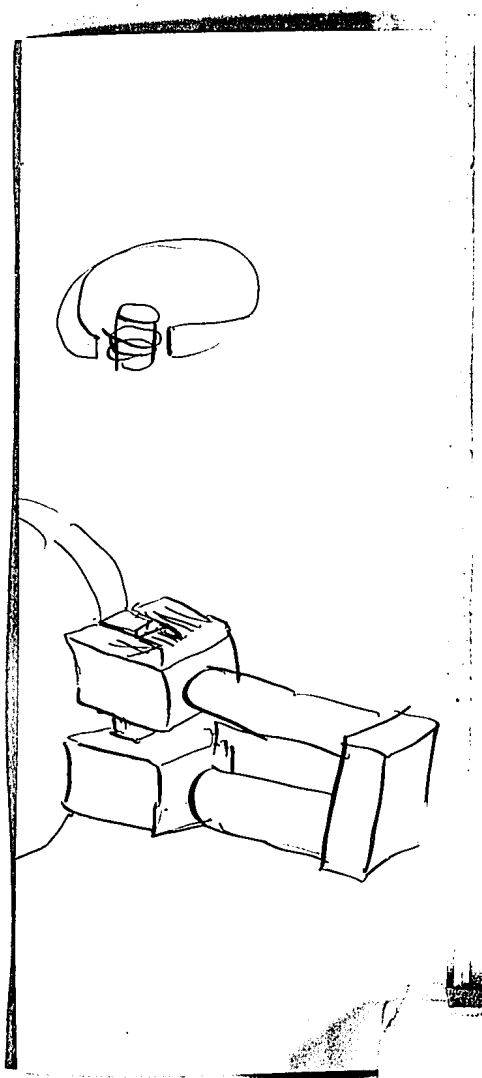




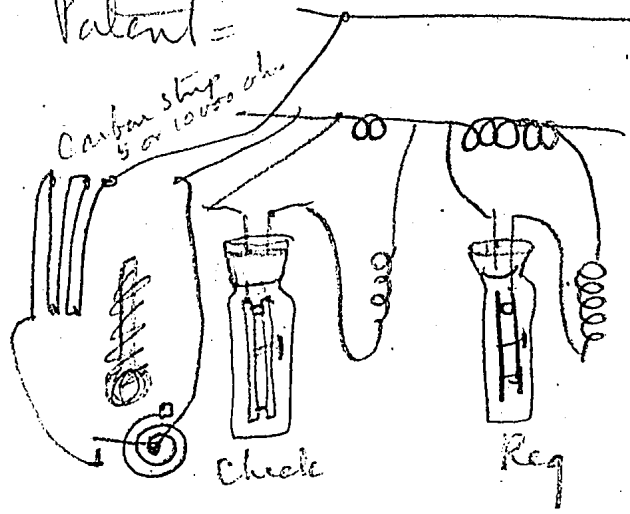


May 10 1981

TAR

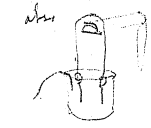


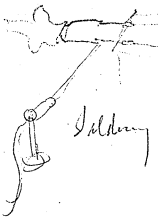
Patent = May 13 1881 Edison



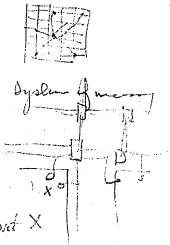
Carbon to hand
spring around or other
Thermostat to close
carbon circuit when
temperature falls too
low by closing circuit

also medium to show cell of Co Pt





Patent
Moulded socket-on
Lamp -

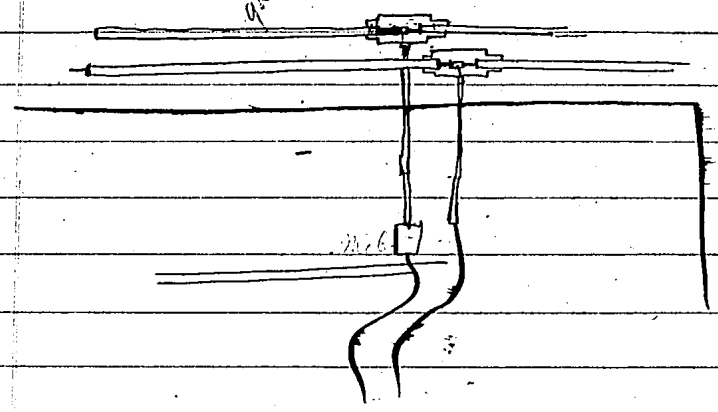


also show new
Cross box
Screw box
Feeder box
also device for
main line

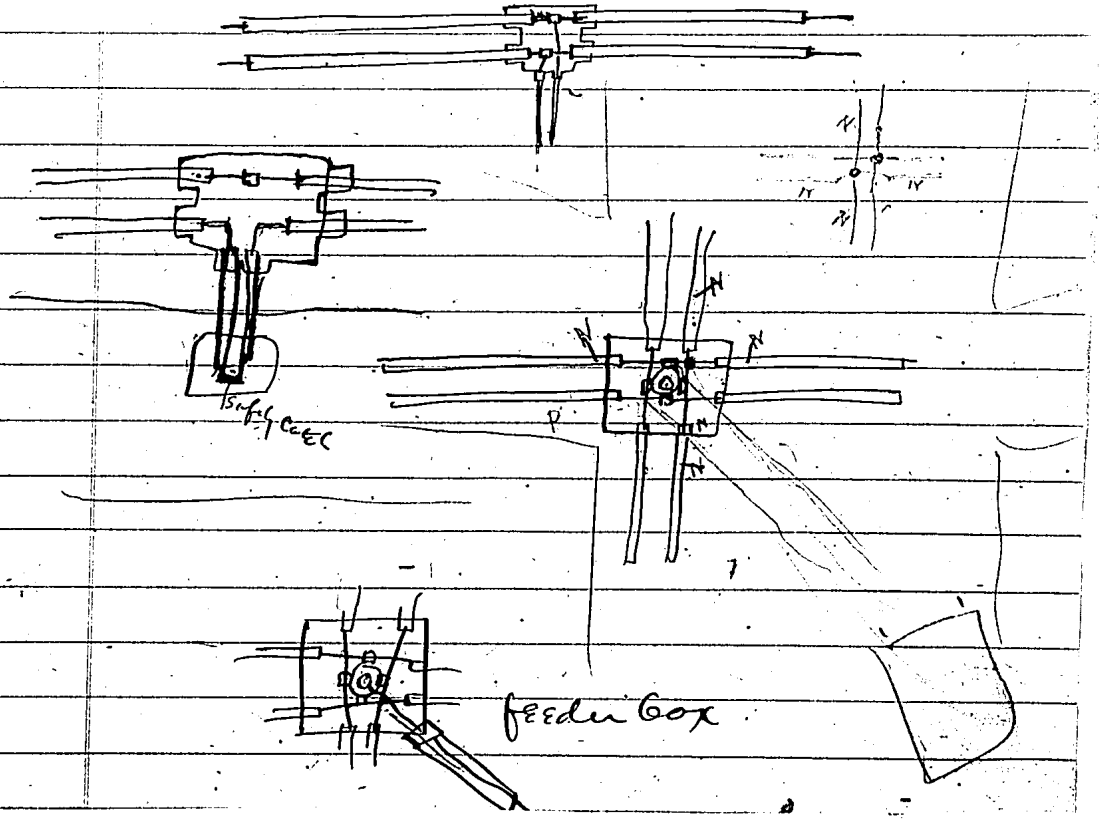
May 16 1881

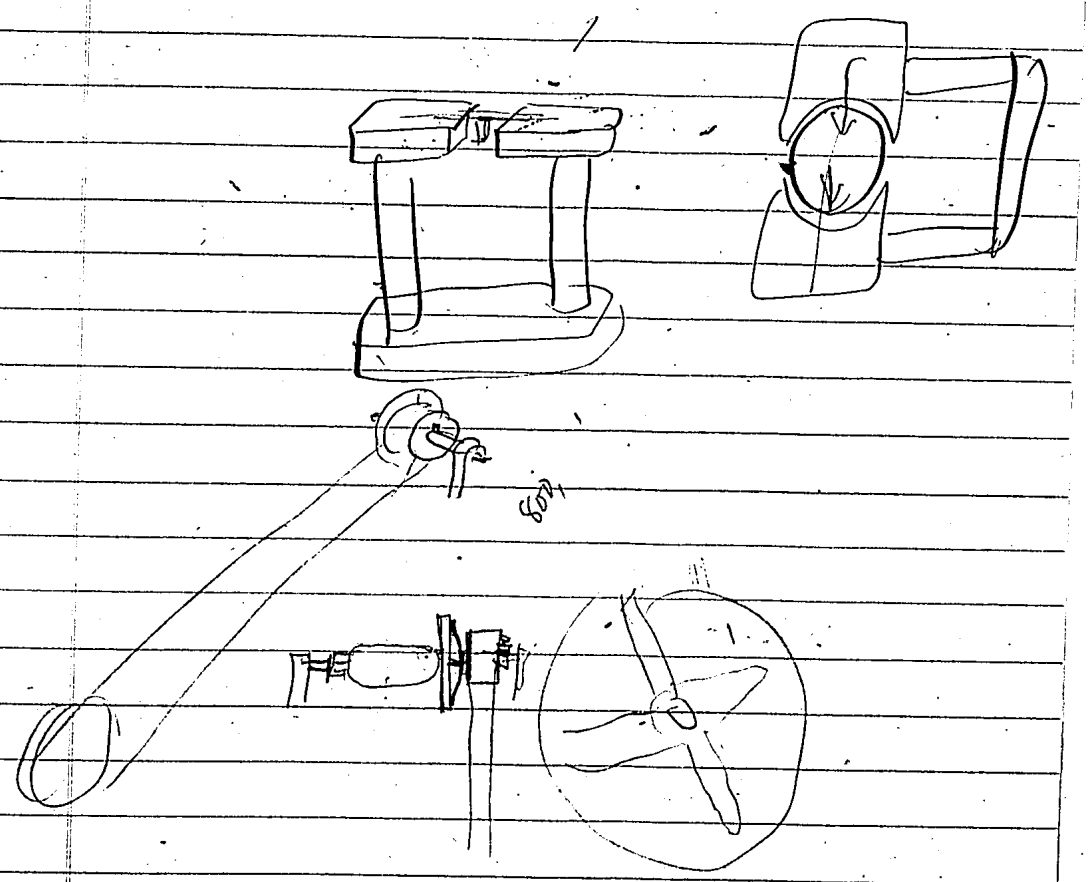
Jas

D. E. Mott



Patent

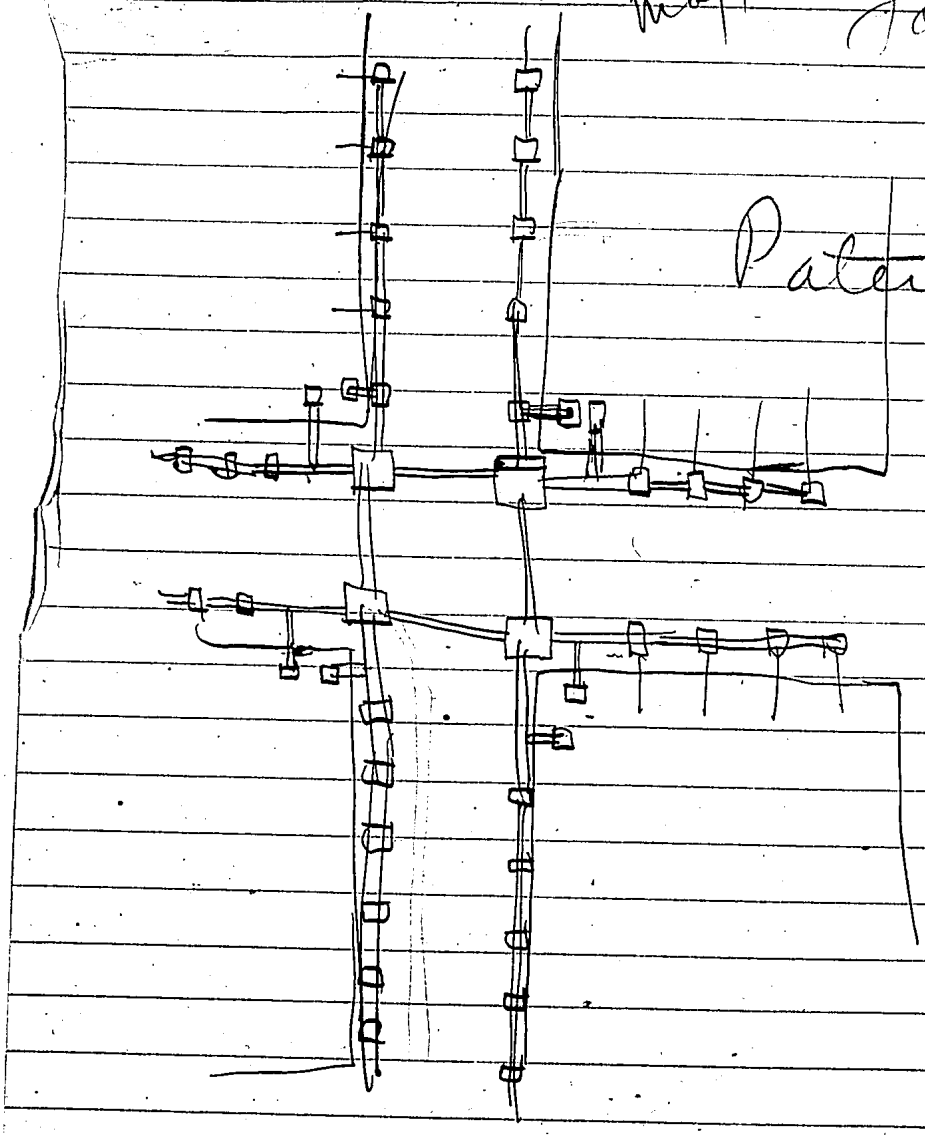




May 16 '84

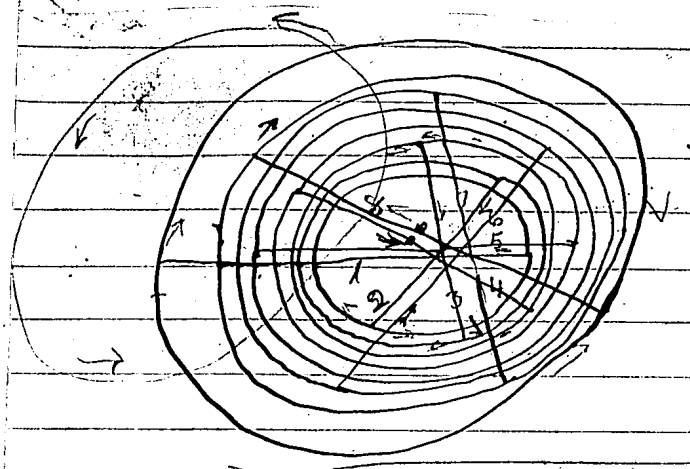
May 16 1881

Patent



Witness

D. D. Hoff

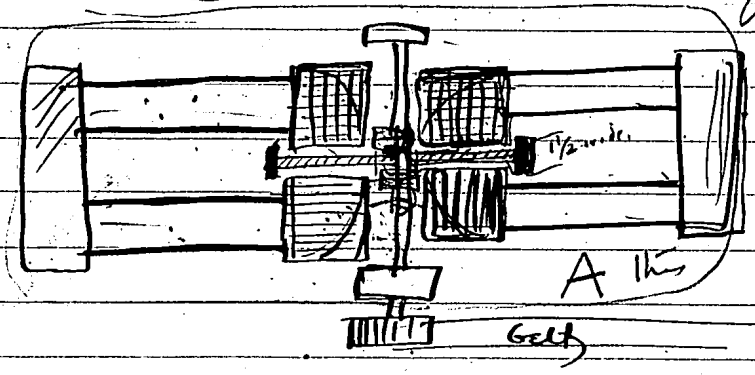


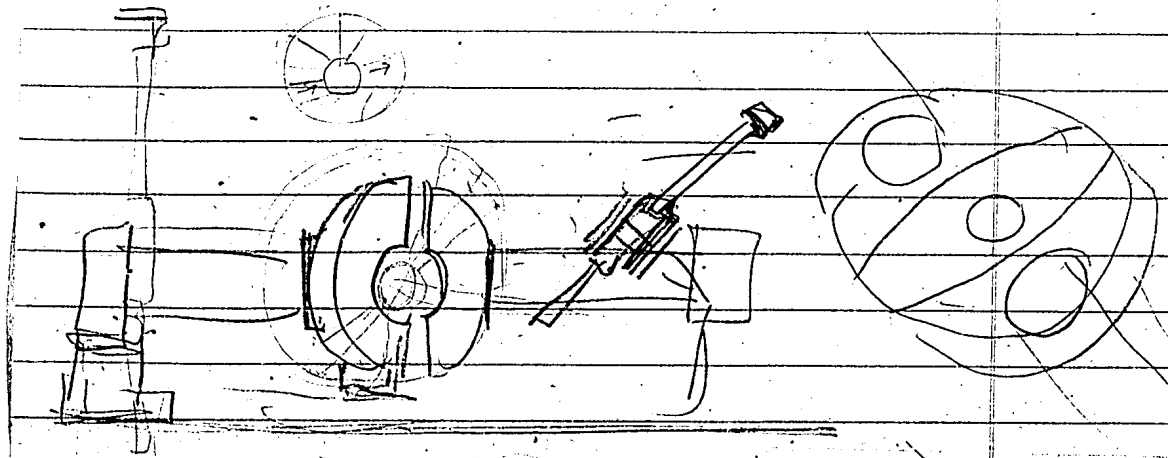
May 16 1881.

JAE

Witness

S. W. Abbott





Cutting Speed
or radial Saws 10. inches

318

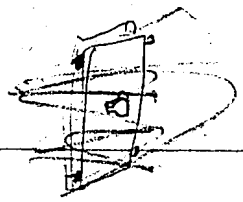
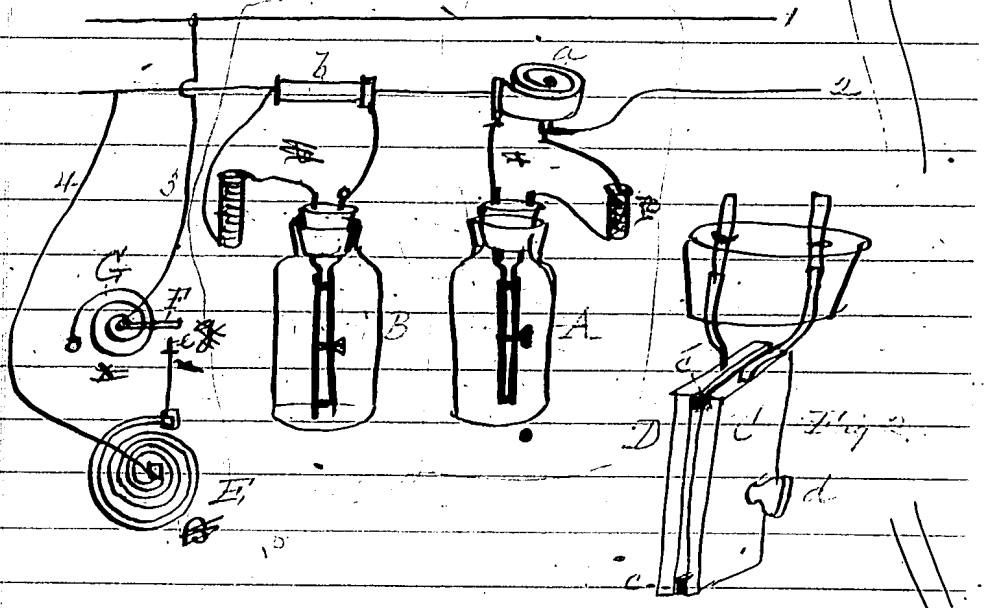
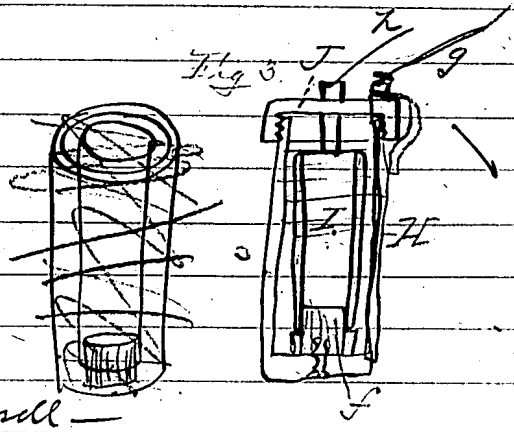


Fig 1.



X is spring which when meter gets cold contracts & lever g closes on n throwing the Carbon Resistance Coil B in circuit & heat is generated sufficient to keep temperature up & meter from freezing. The whole meter being in clock box

Fig 3.



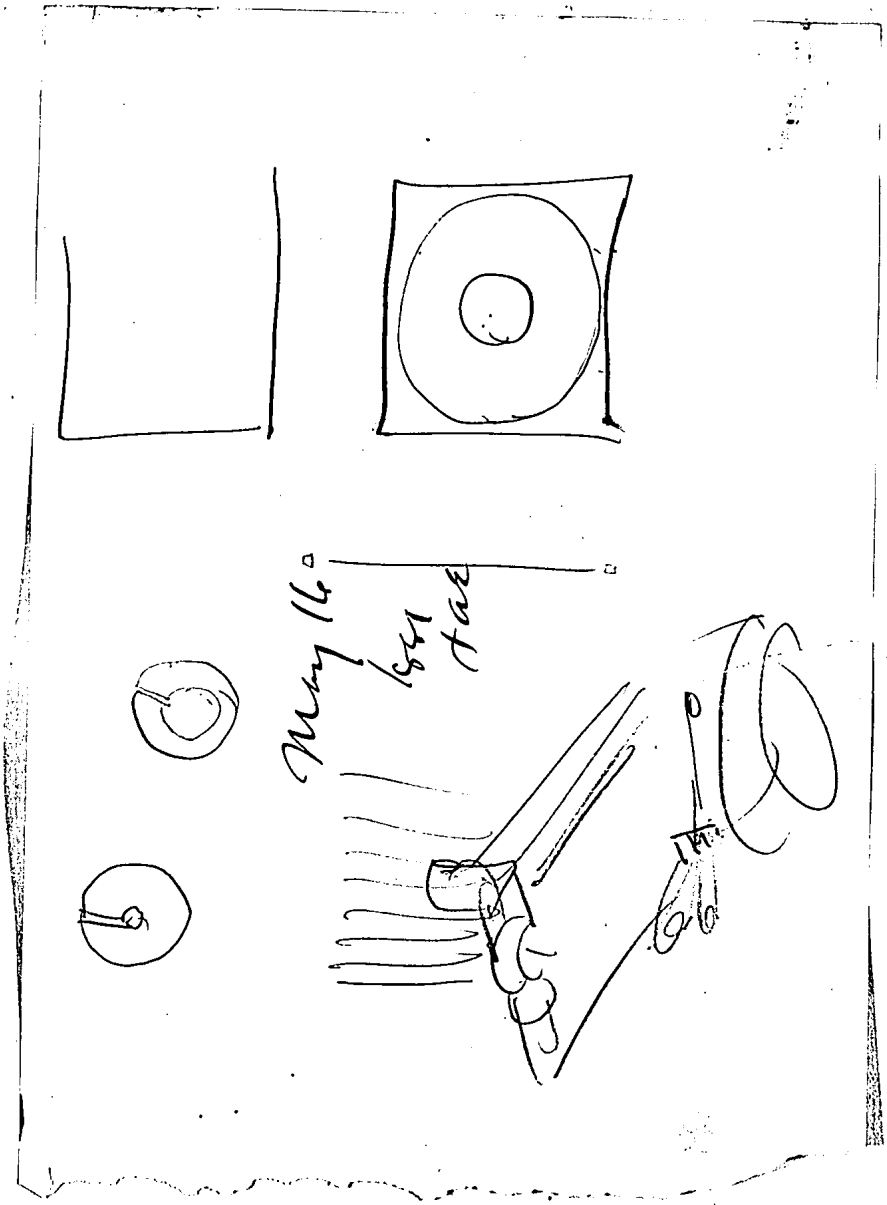
May 16 1881.

Arturus

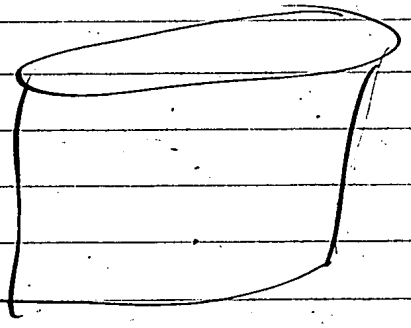
S. D. Mott

Copper Vessel —

— May 1881 —



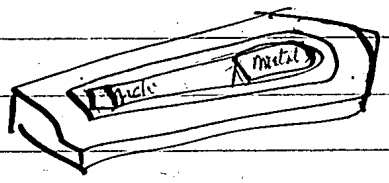
Plumbago moulds for Carbons.

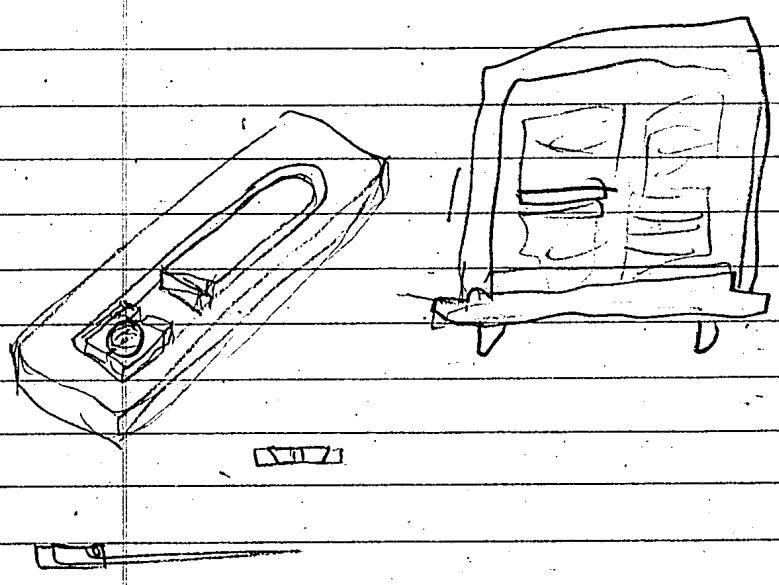


May 16 1881 TAE

Etc Witness

S. D. Mott





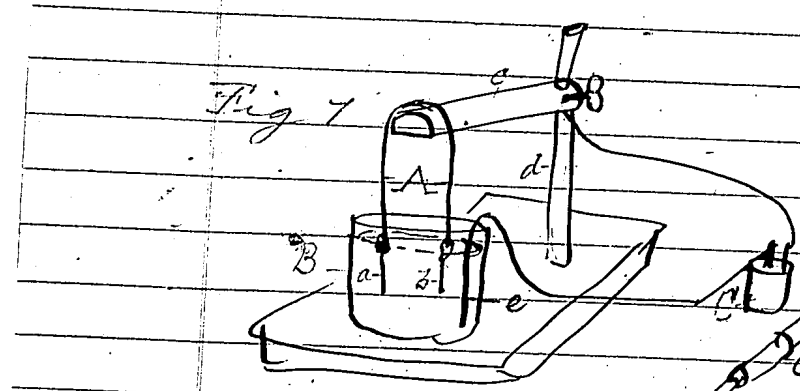
3 A.
11

Matt

May 16 1881

Witness
S. D. Mayo

Fig 1



The

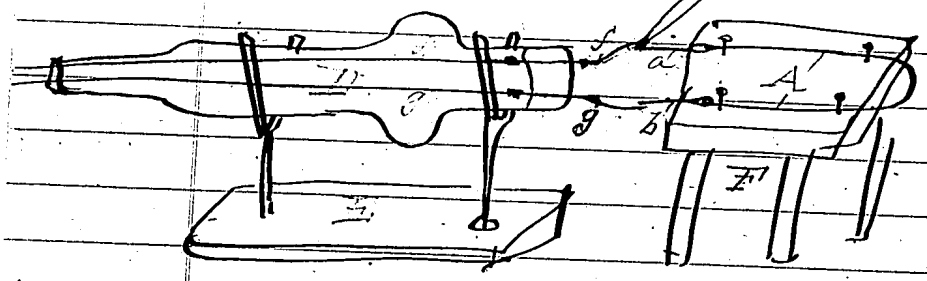
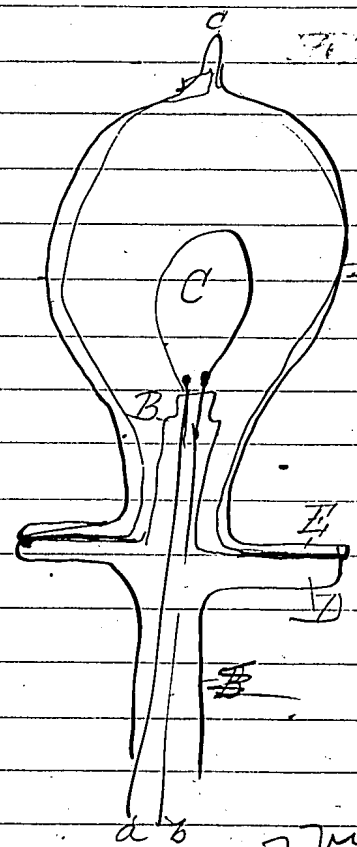


Fig 2.

B17



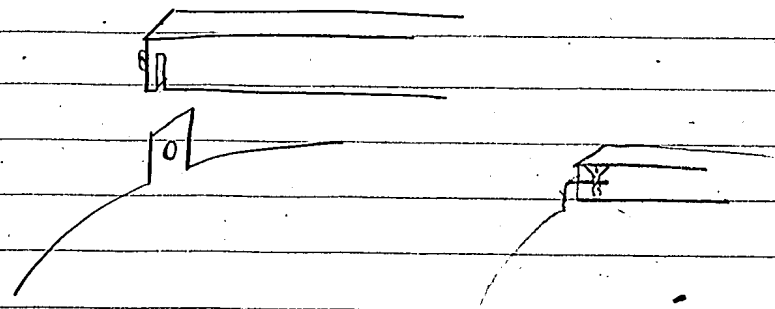
ground flat
Grease always keep
a tight

Vacuum
~~Vacuum~~ Sub.
Such as bird lime
liquid
~~rubber~~ rubber or
Paraffine, grease

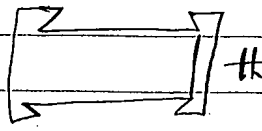
Nov 16 1881
Tel

Witness
A. D. Mott

May 17 1881
TAE



Make detailed drawing
of present steam Dynamo —
Claw coupling of Dynamo
with Engine = Swing pulley
block = Spiral spg in Grooves —



the method making Commutator

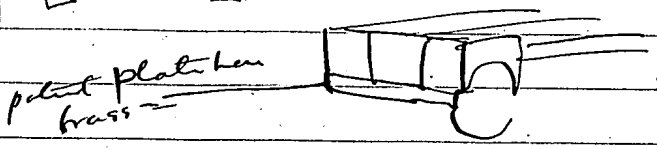
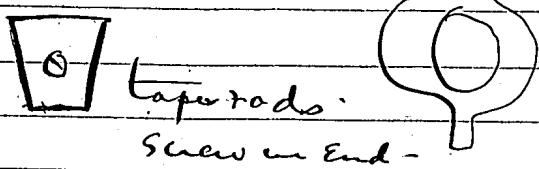
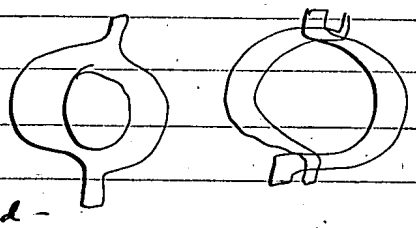


plate platform
brass =

Zinc Cases, non magnetic
Bolts =



Taper rods.
Screw on End —

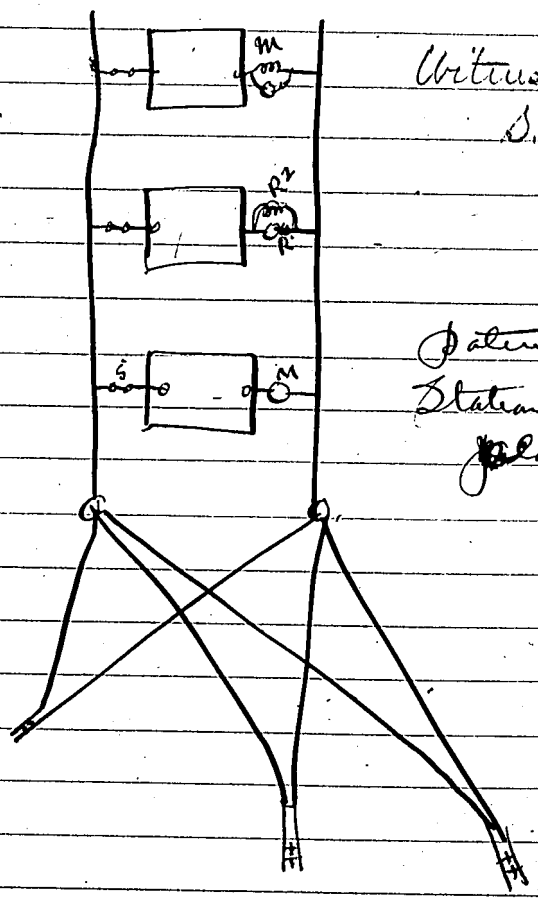


the two

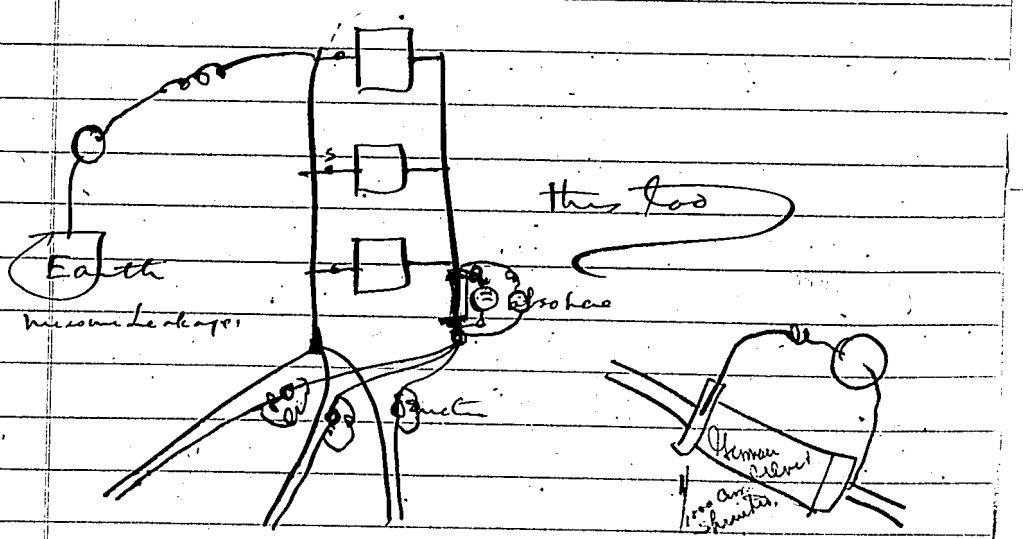
Covering surface iron with mica — mica
between gun iron —

May 17 1884

Witness
S. D. Mott



Patent
Station meters
Place to put it



316

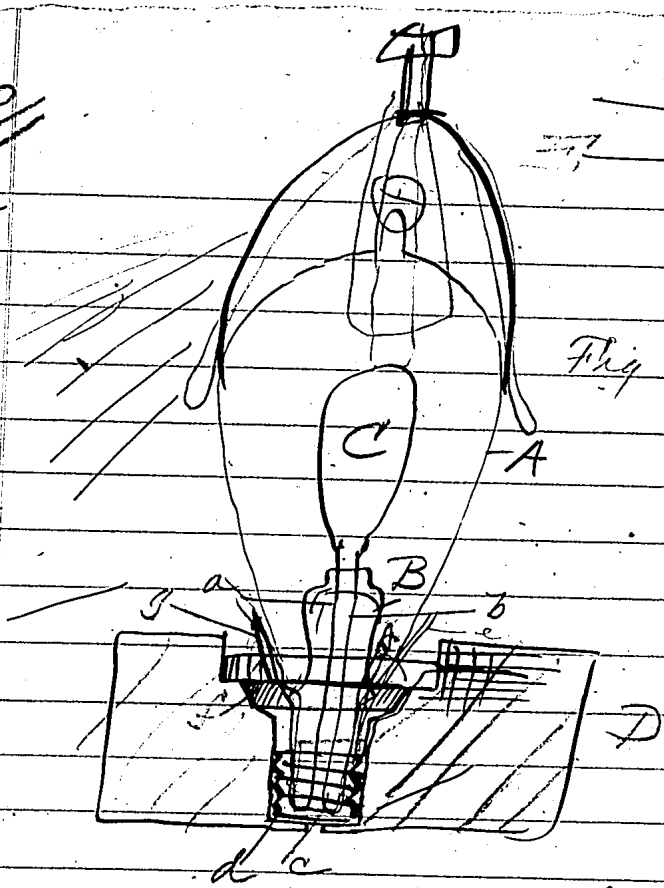
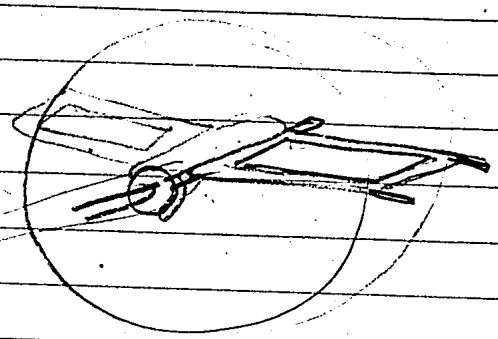


Fig 1.

Witness
D. D. Mott

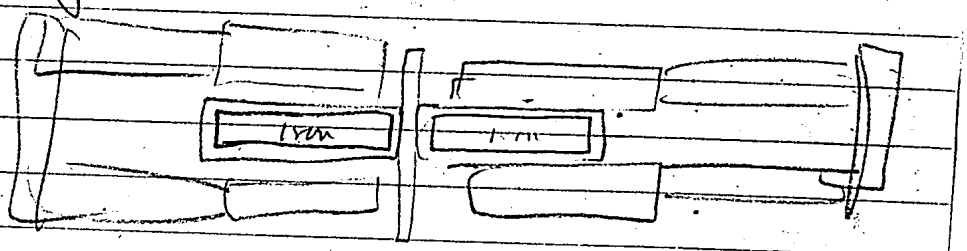
Moulding Socket on Lamp
May 17 1861 Tax

Make figure 2 a vertical section of lamp and socket near socket complete, no basis for claim. a a
Patented Aug 6 1861



May 18 1881 905

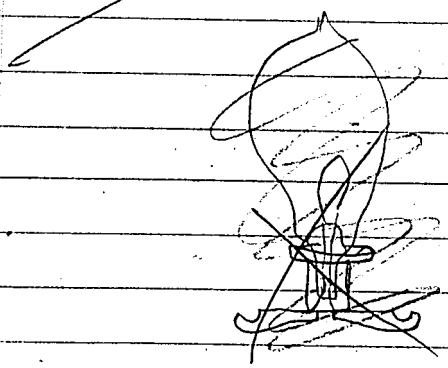
Radial bars like a printing chase. inner bit

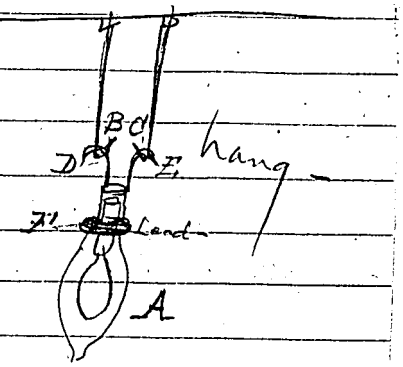


— May — 1881 —

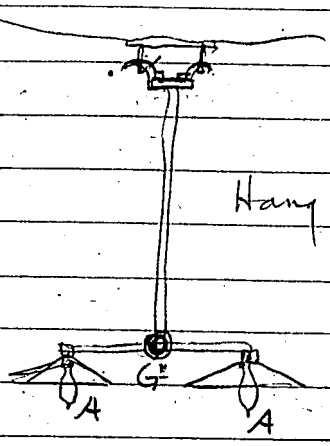
321

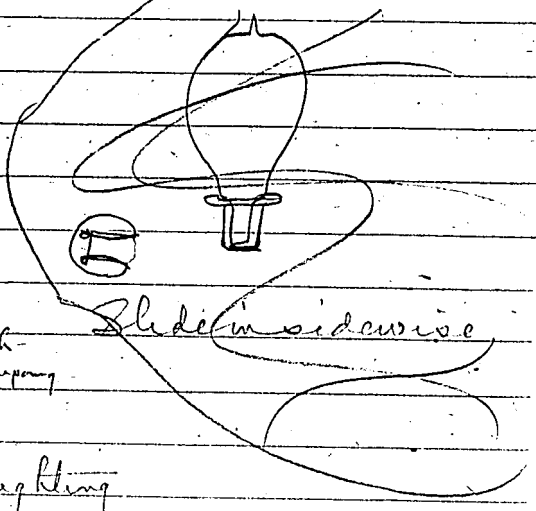
May 19 1881 4 a 9

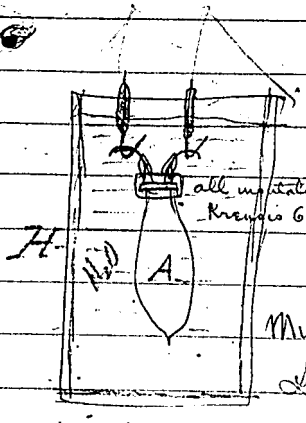




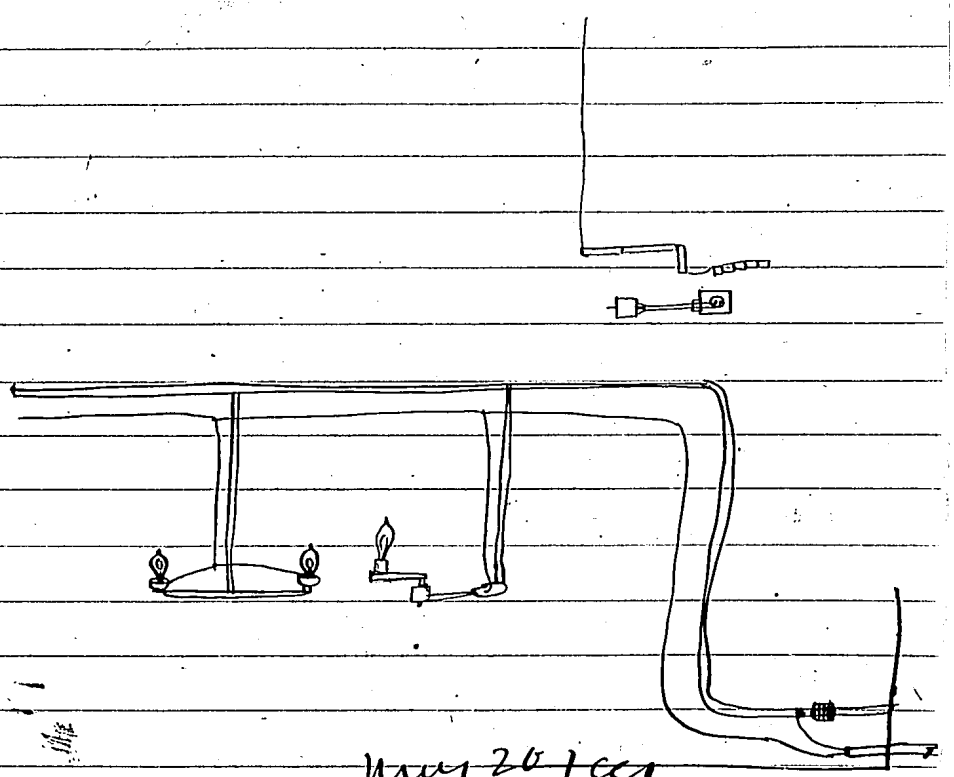
Witness
S. D. Mott





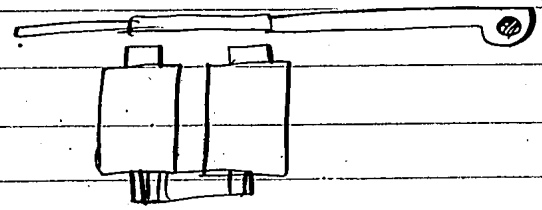


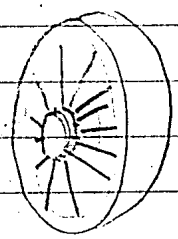
100 105



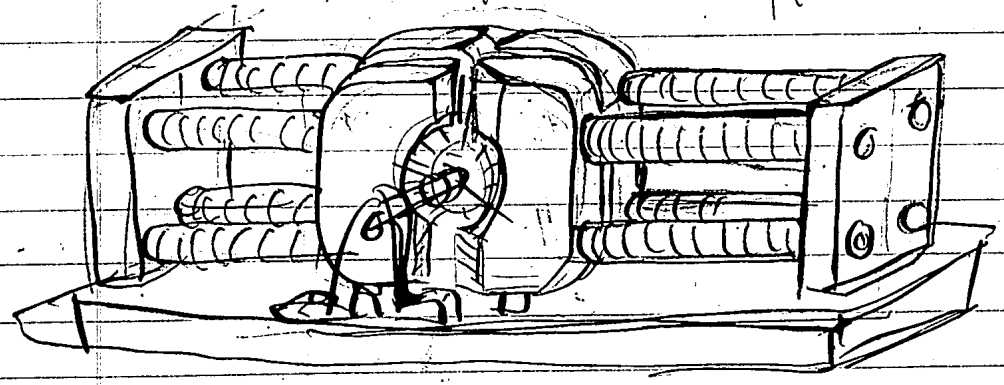
Hurder
Horder
Hurder
Horder
Horder
Holder
Henry
Hurder
Horder
Hurder
Hurder
H 9.45.
9.6000
96000

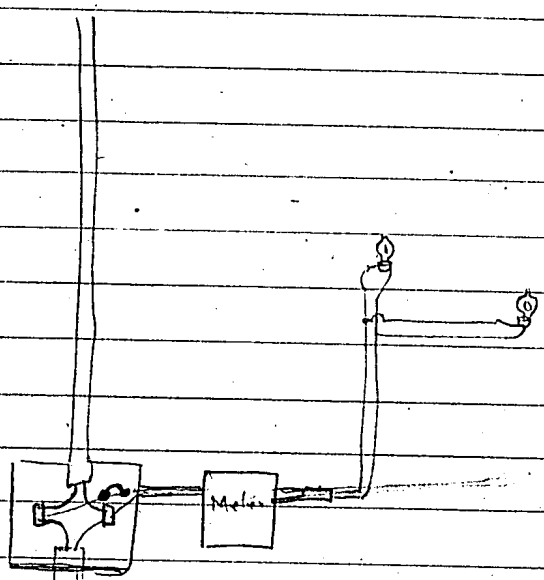
May 20 1551 JAR





Witness
S. Dillon — Desc Dynamo —
May 20 1881 TAE
A
Thos
Field —

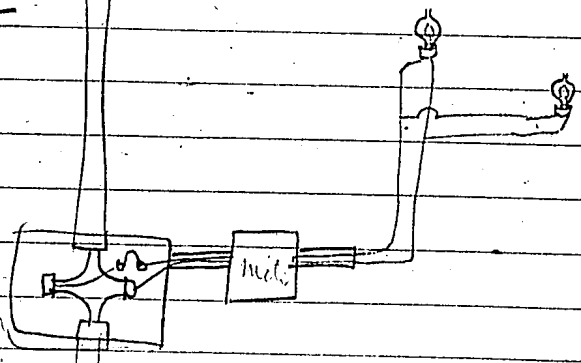


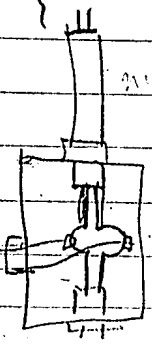


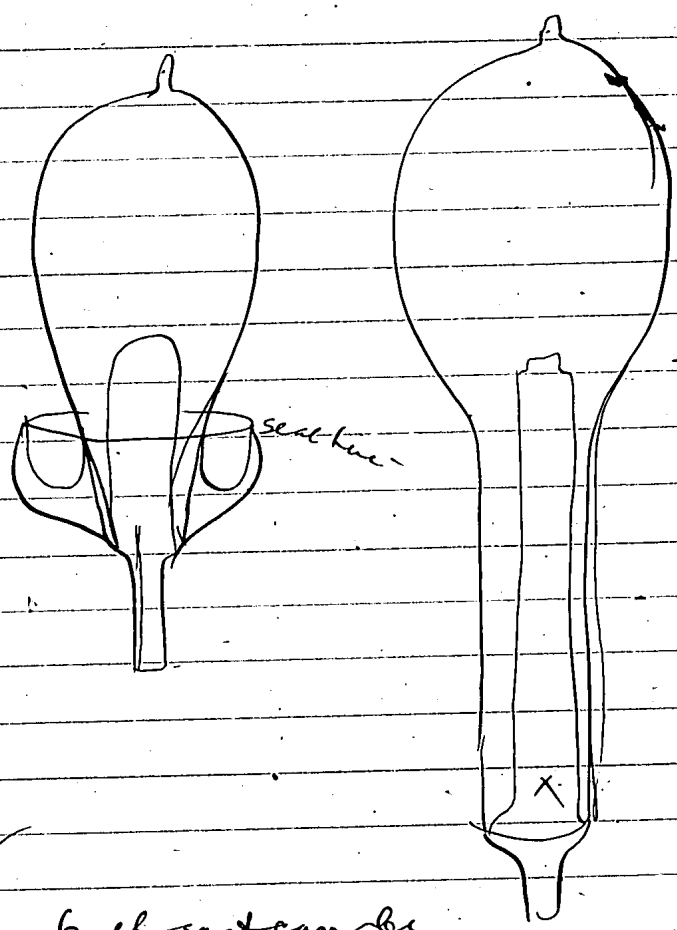
May 20 1881

T.A.E

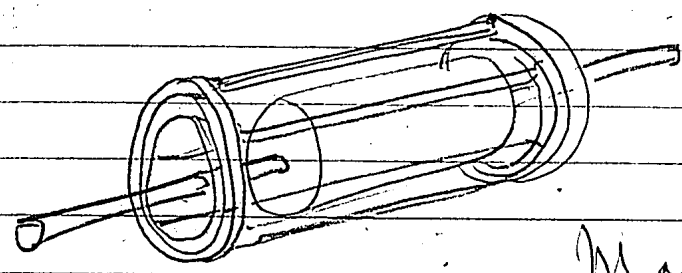
S.D. Mom-



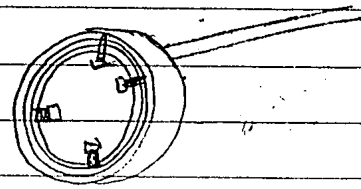


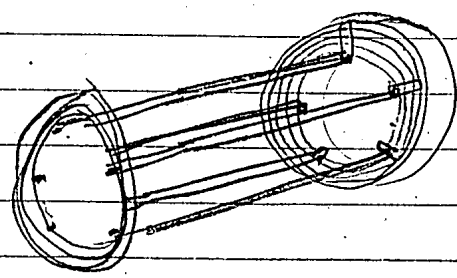


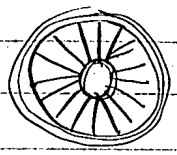
Long bulb seal can be
cut off + used many times
May 20 1881 PAE

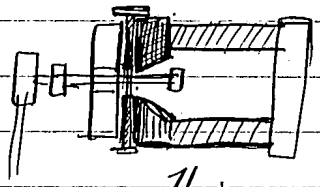


May 20 1861
TAE

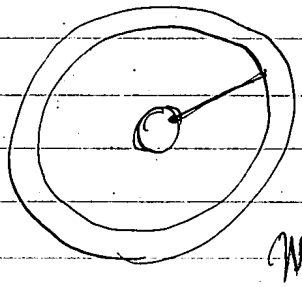




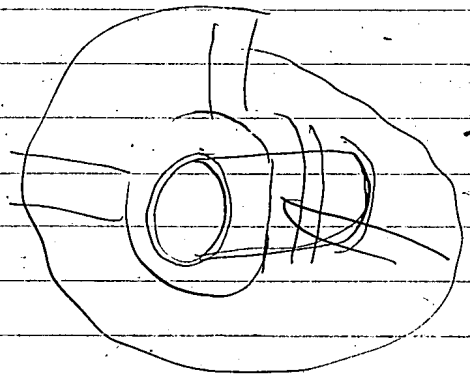


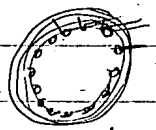


This

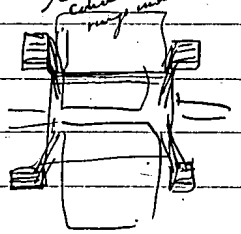


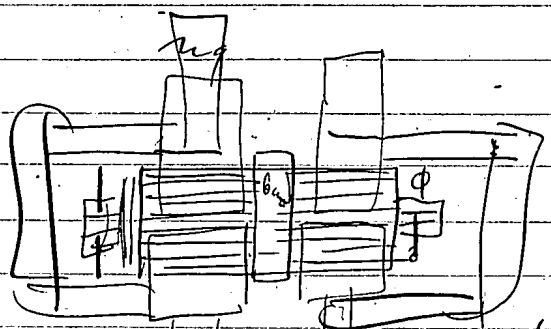
May 20 1881 TAE





This way we
reg machine for
winding bands
magnetic fields

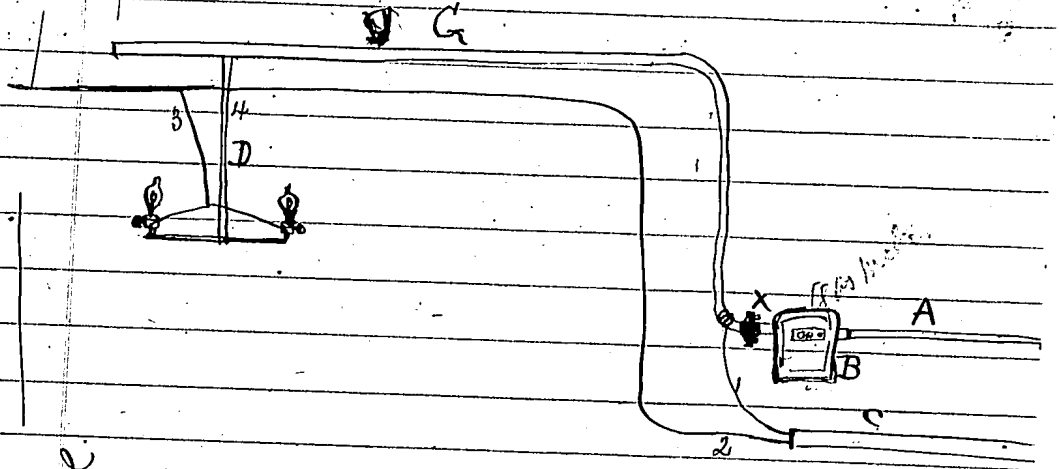




Reg - the principle applied to
Regnault's boats in miller -
but only 1 Commutator

Case No. 324

Using Gas pipes in House only

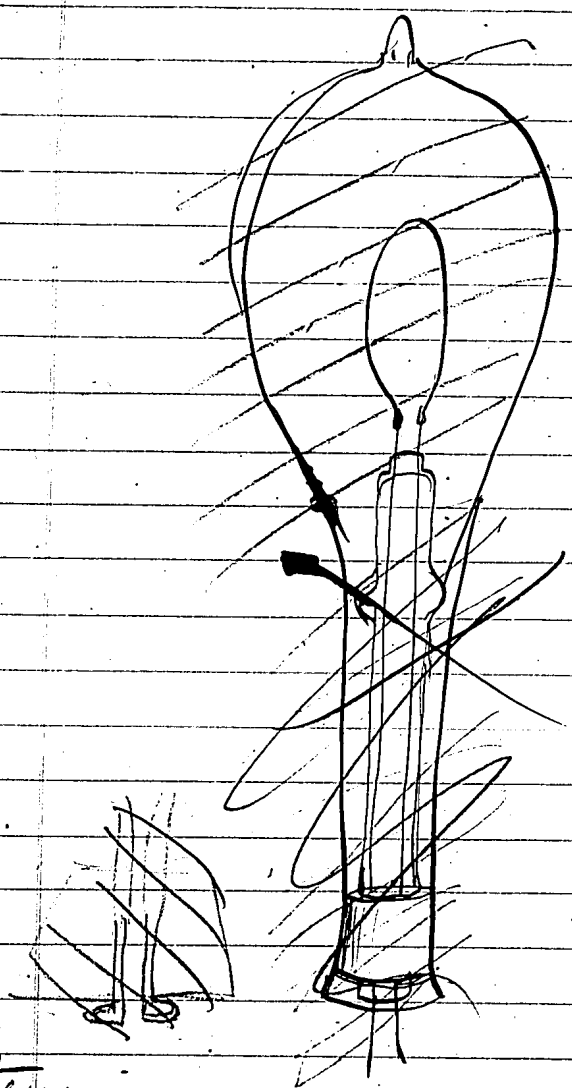


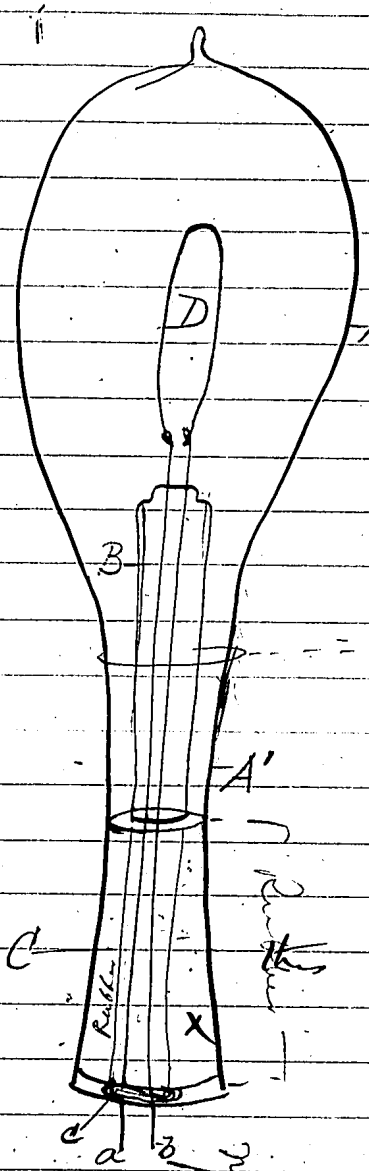
Insulating joint put in Gas pipe at Gas meter C by the Electric man G the gas pipe —

May 20 1881 Tax

Witness
S. D. Mott

820





Witness
S. Dellorf
X. Rubber

May 20 1884 Page

322 322

Fig 1

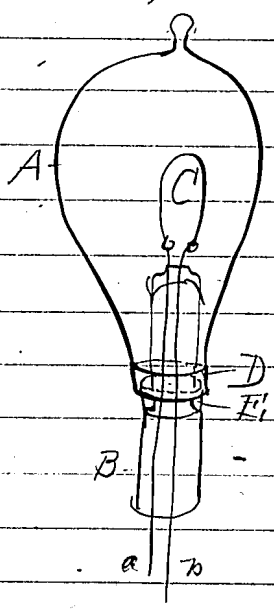
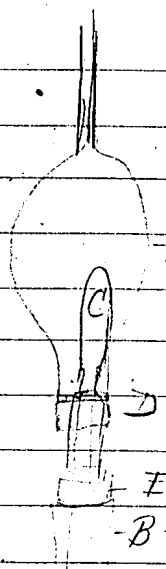
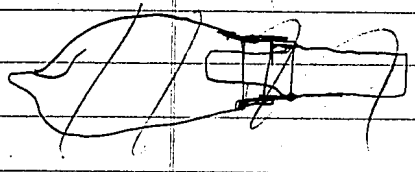


Fig 2



Platina seal
a b

Soldering two platinum rings together =

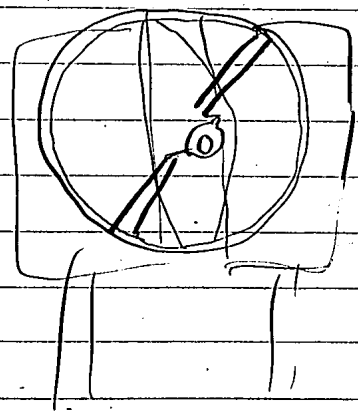


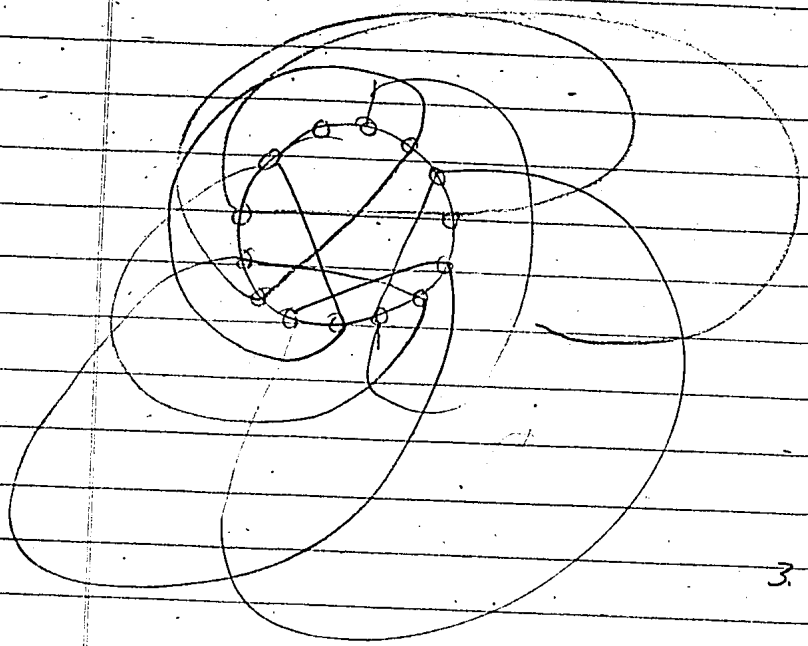
Witness
S. D. Mott

M.

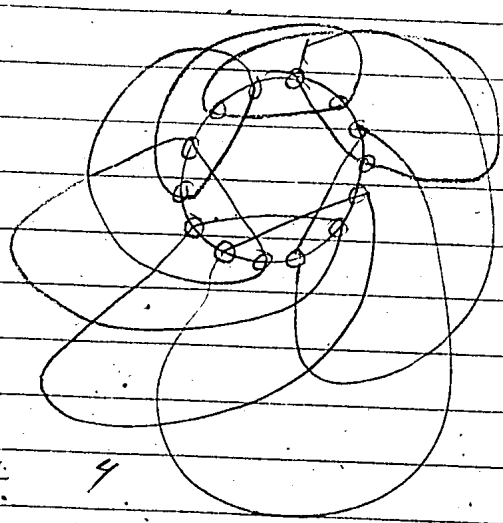
May 20 1881 Tate

Rubin
Taken apart
by heat or
acid (nitric acid)





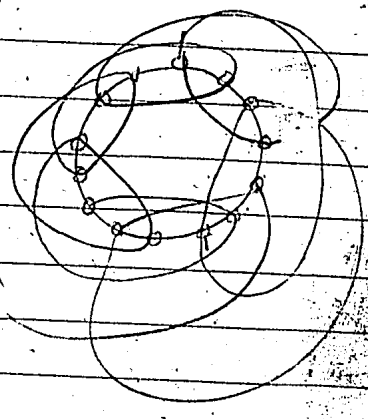
3 1/2



950
848
102

30
300.
900.

4

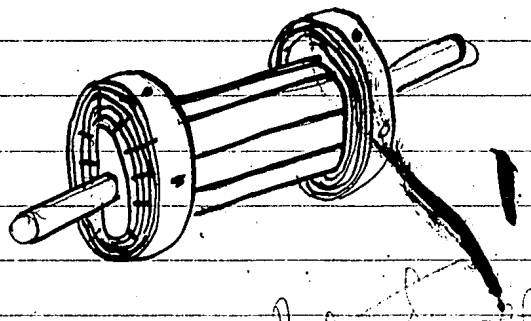


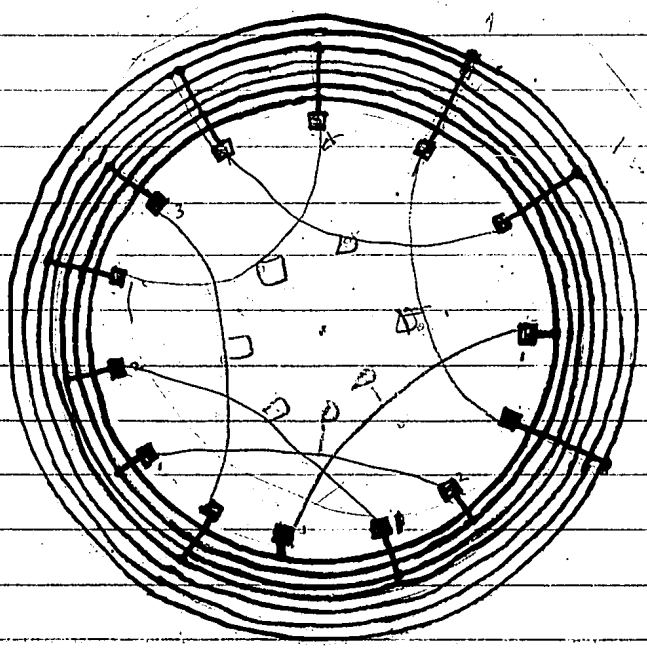
3394
25
0
697
648
0
49
48.

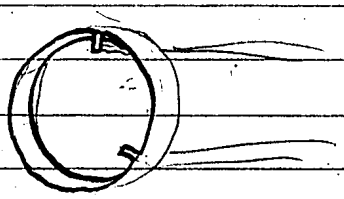
3

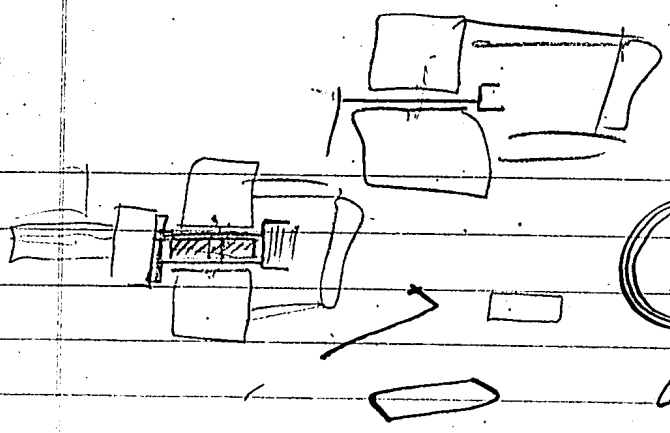
May 21 1882 Pat

Witness D. D. Mott



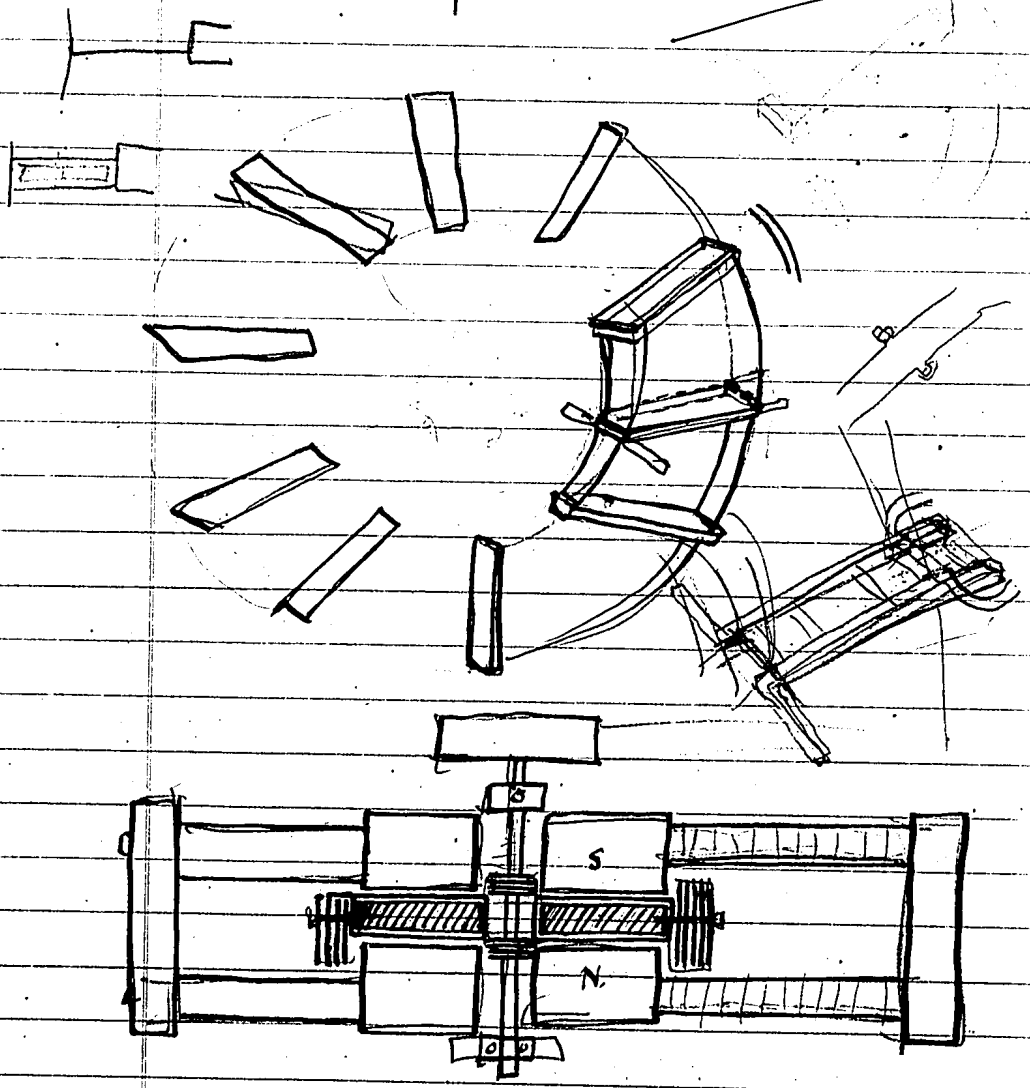




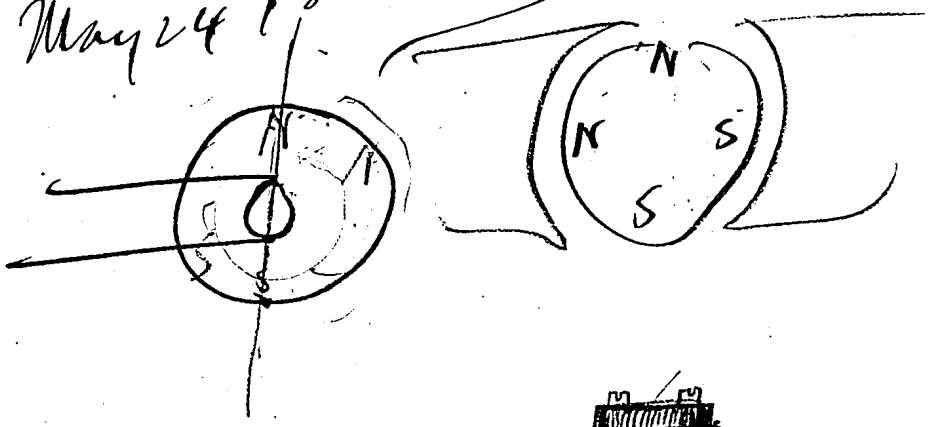


Uniting
S. C. Mott

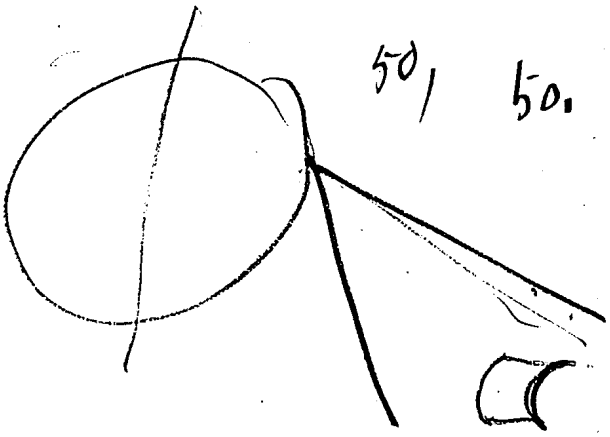
Patent May 21 1881

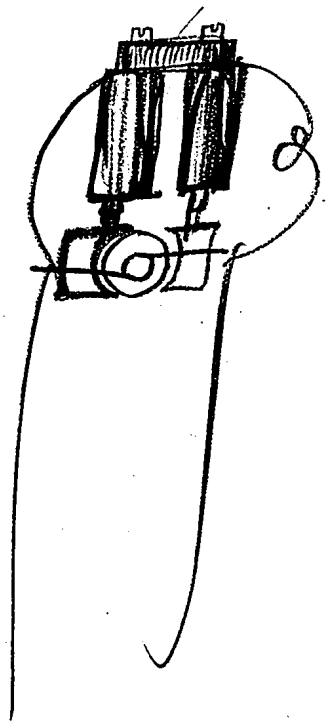


May 24 1881



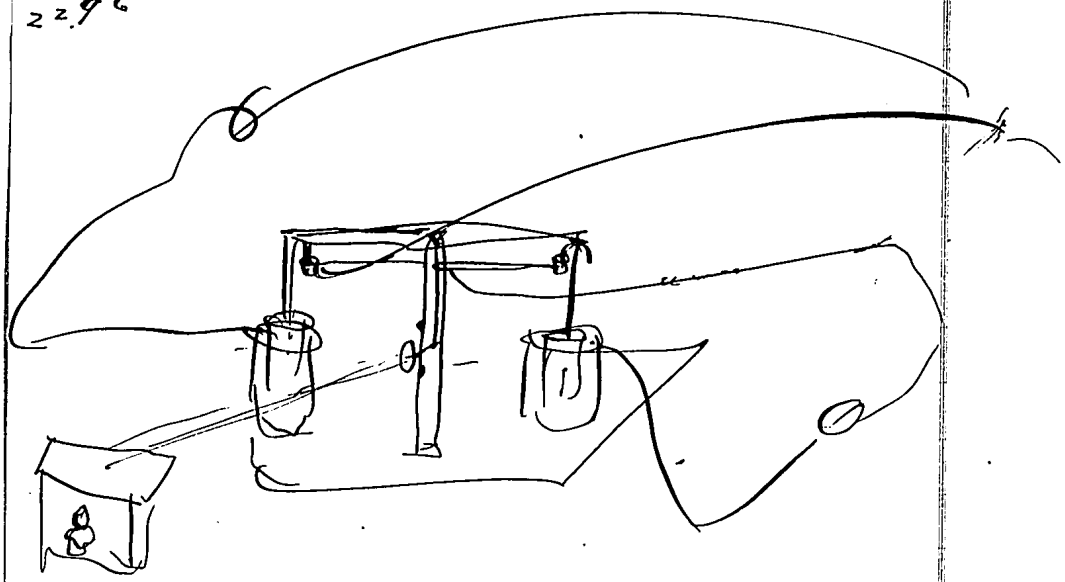
50 / 50.

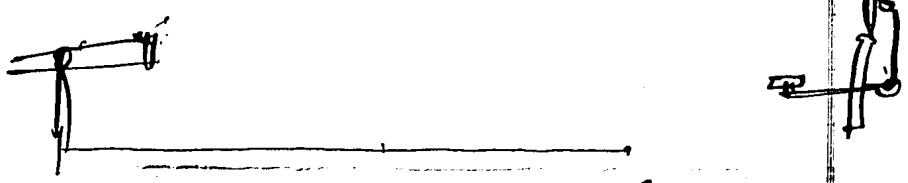




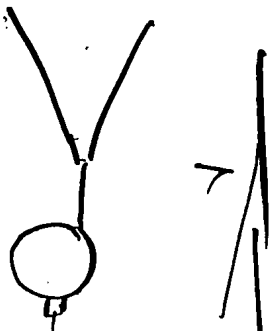
82
13
246
82
1065
1230
2296

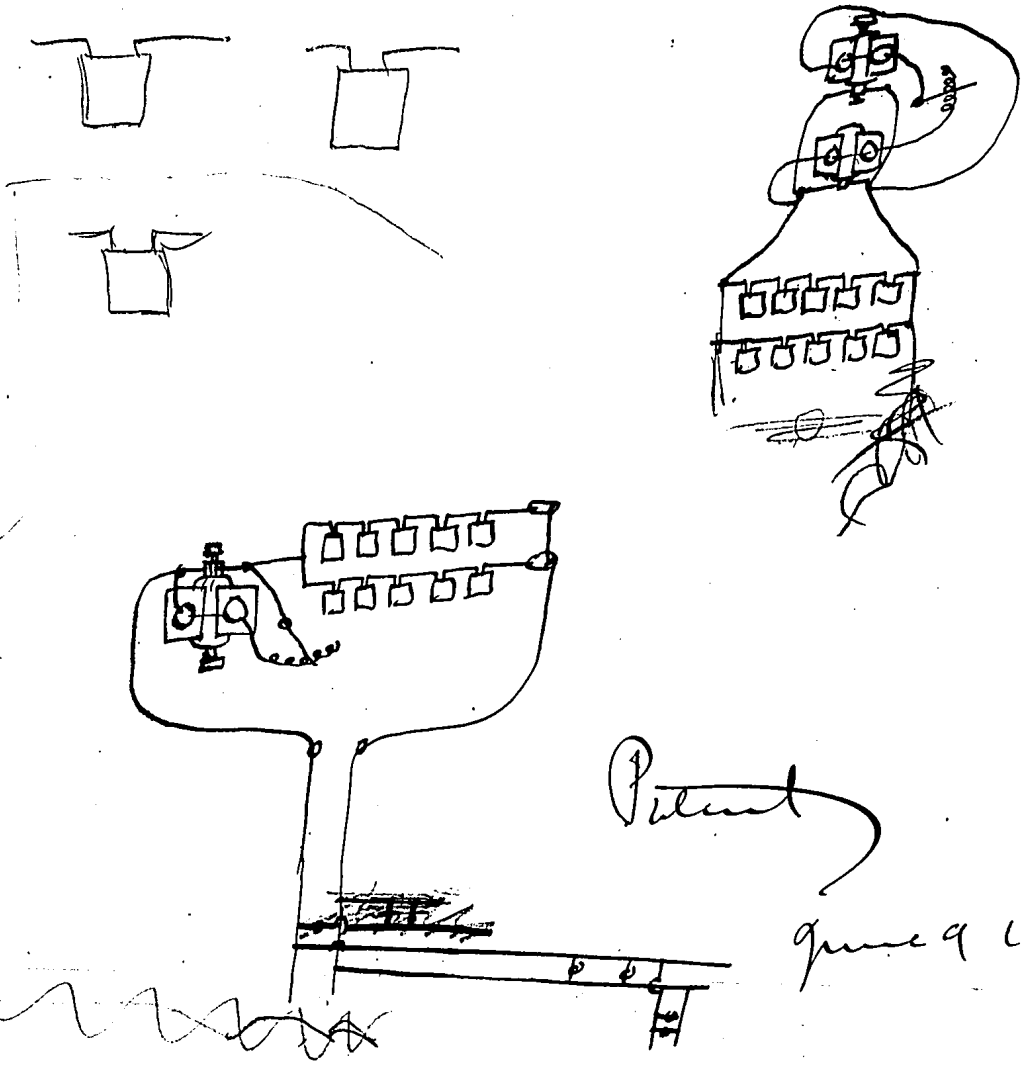
82
10
410
82
1230

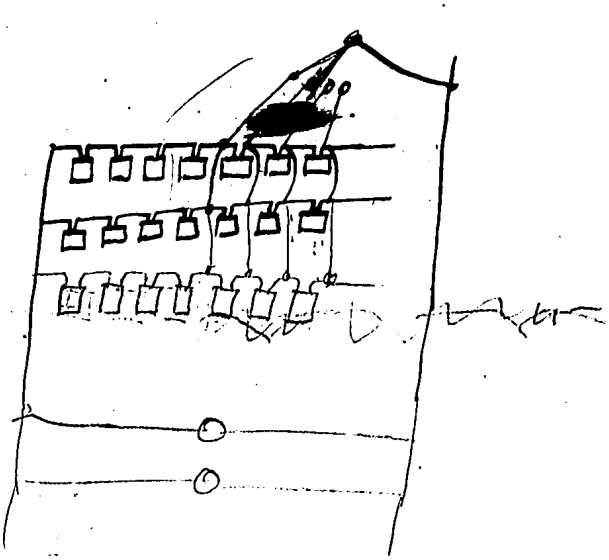


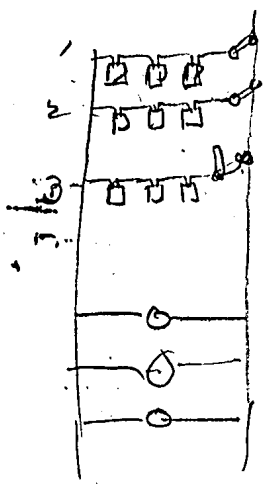


May 24 1881 T&S





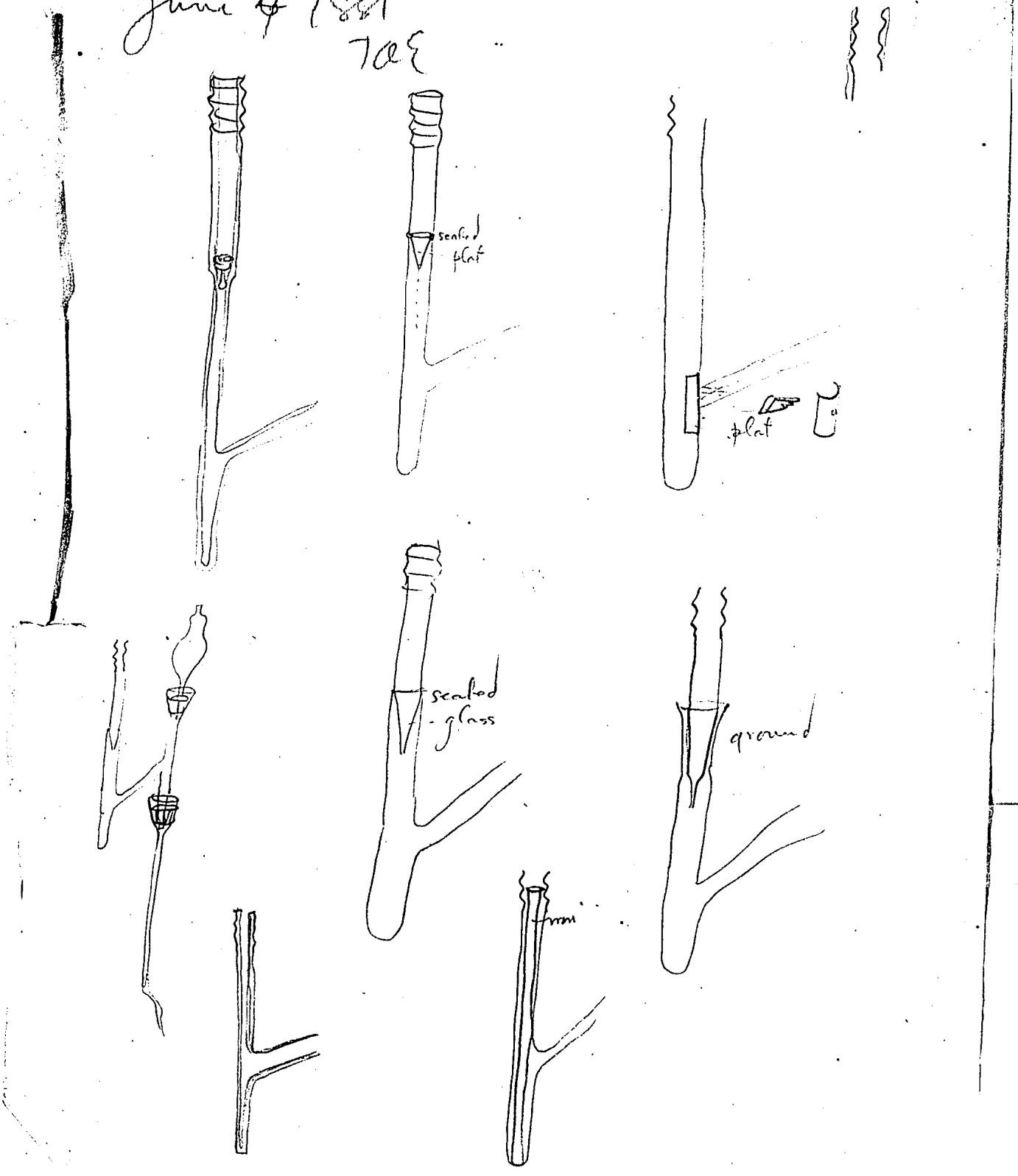


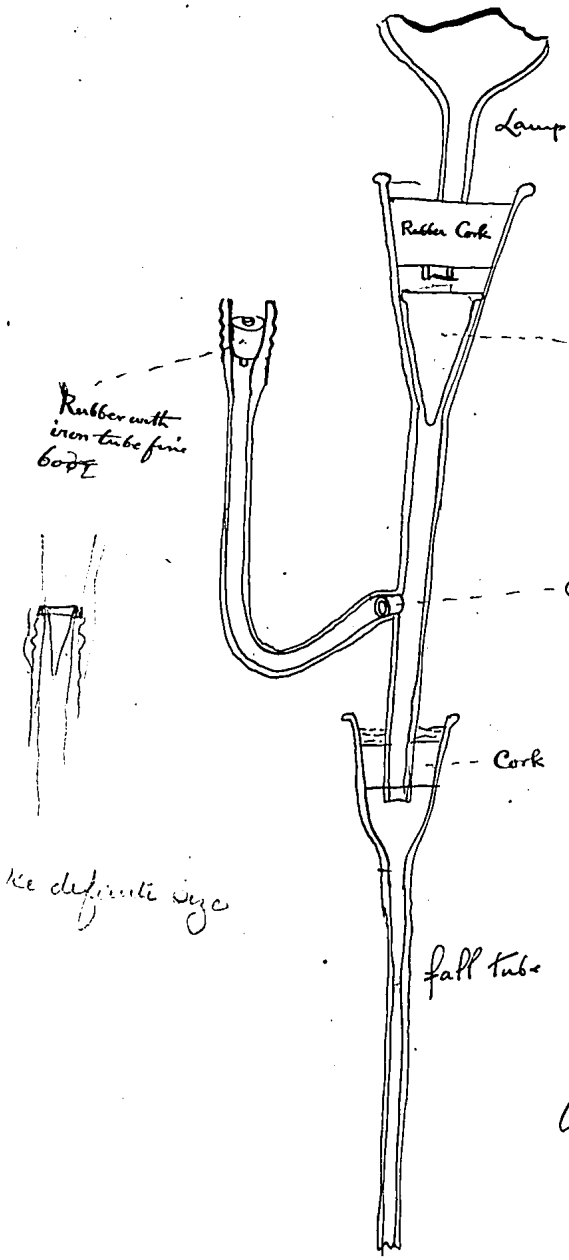


June 1881

June 4 1851

70 E



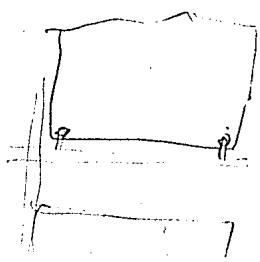


To make definite byo

Patent for Matt

June 6 1881 [illegible]

Witness
S. D. Matt



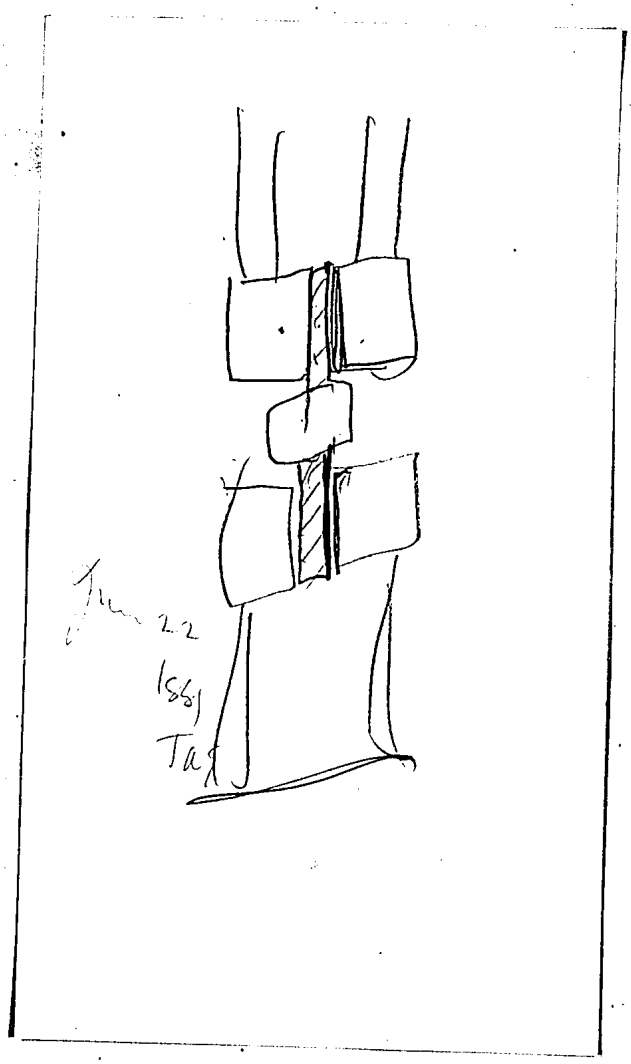
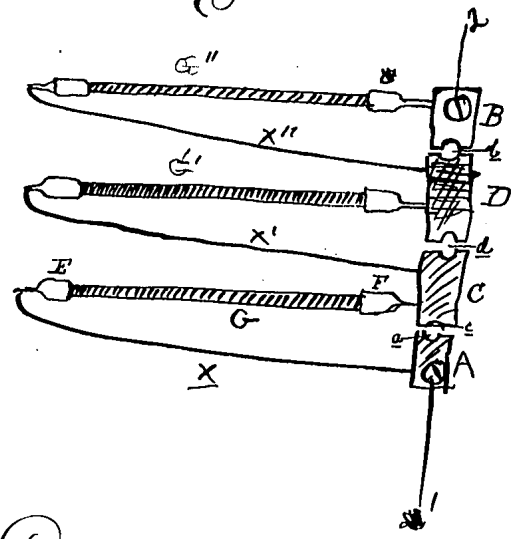


Fig 2.2
ISS
Tag

Case 330

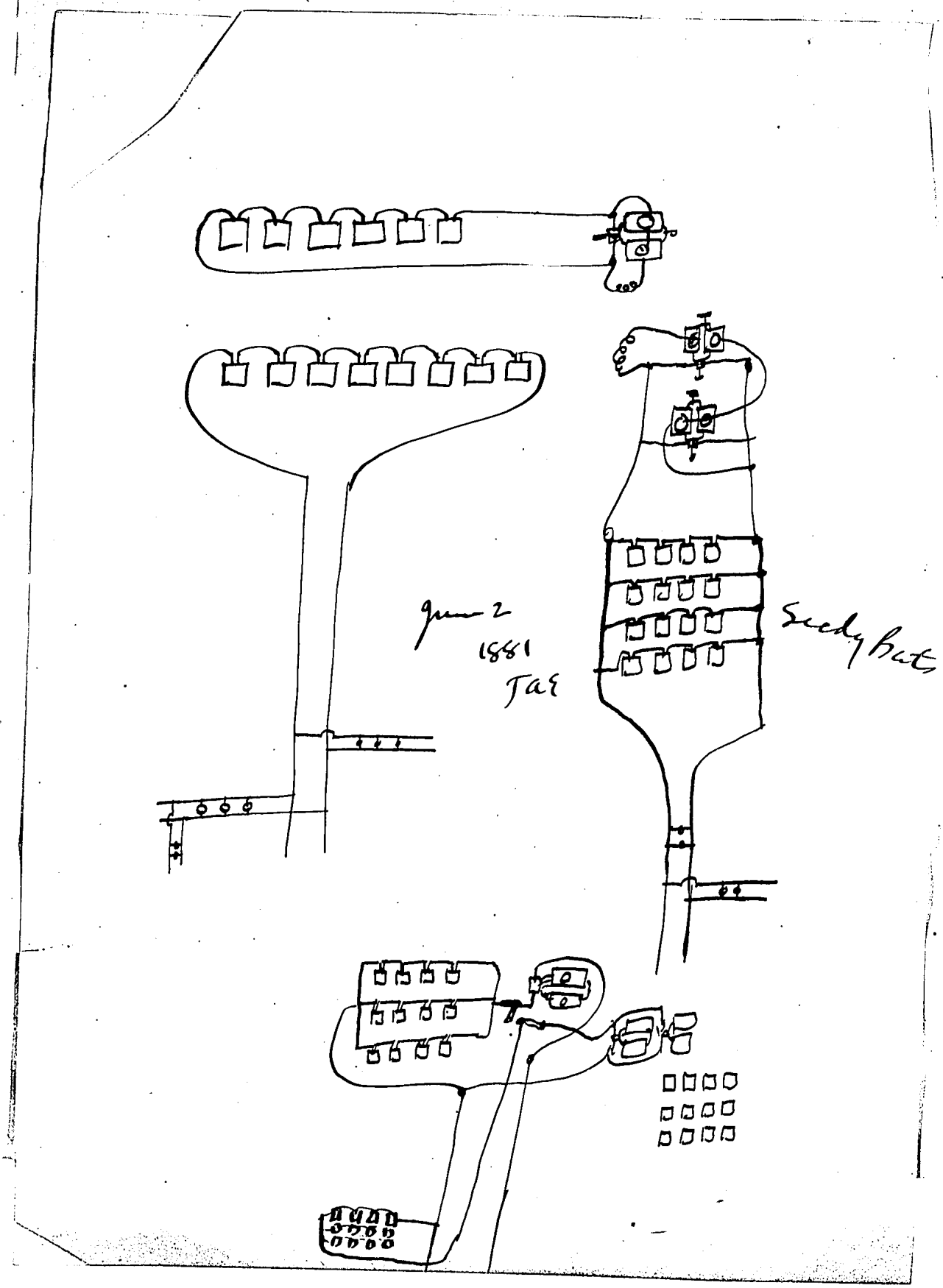
Drawing for patent

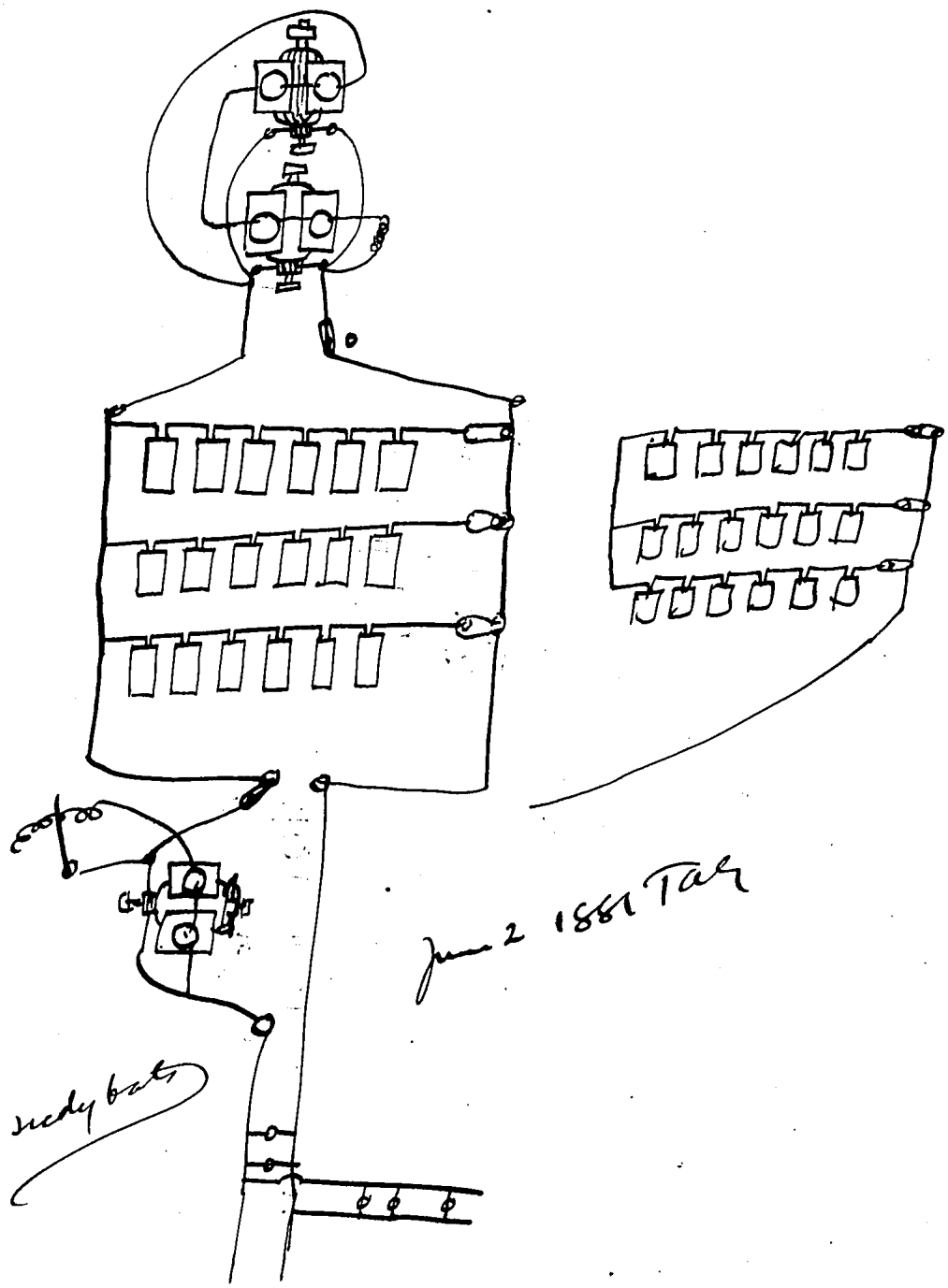


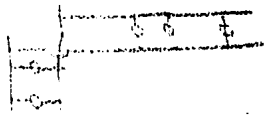
Carbon Rheostat, Copper plated Ends
Platts to the wires E E' are the Ends X
the wires, G the Carbons of plumbago
or a Carbonized Material=

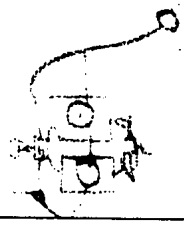
NY June 3 1880 Pat

Witness
S. E. Mott


June 2
1881
Jas
Study hat


June 2 1861 Tar
study bat

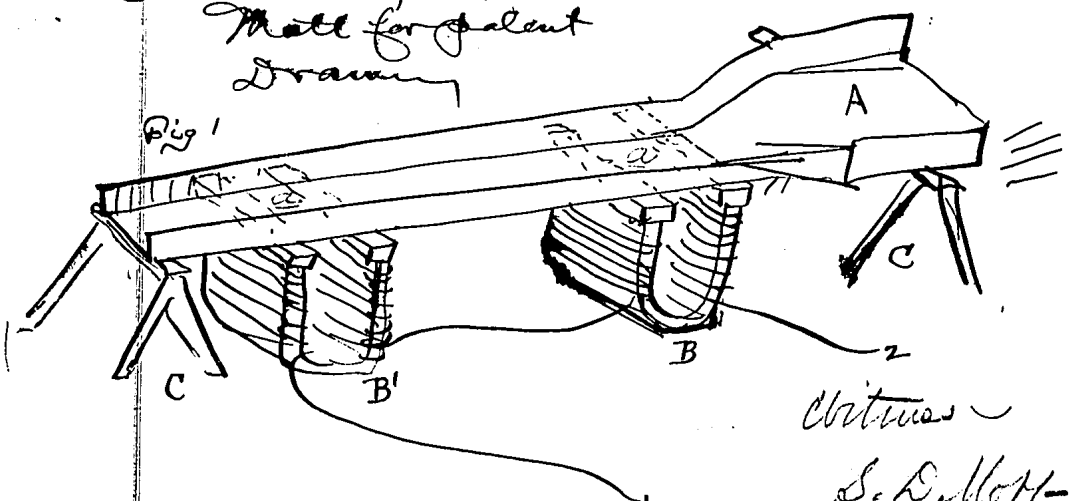




June 3 1861 —
Tab
Model for patent
Drawing

Case 329.

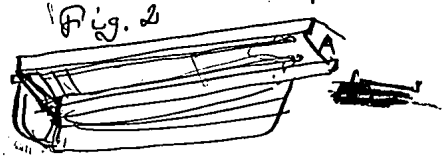
Fig 1

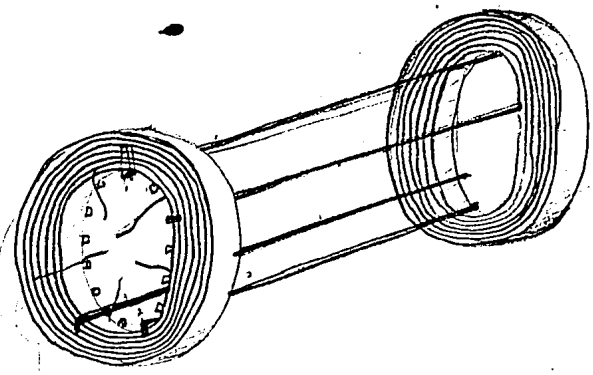


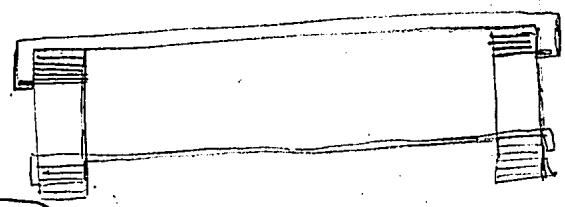
Witness ~

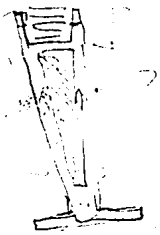
S. Dillon —

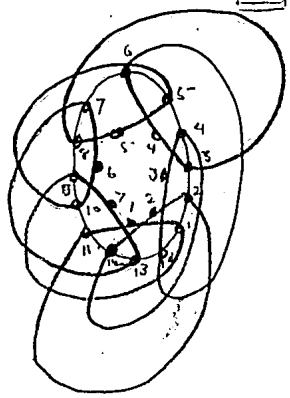
Fig. 2









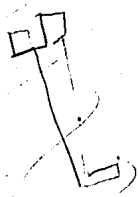


Matt

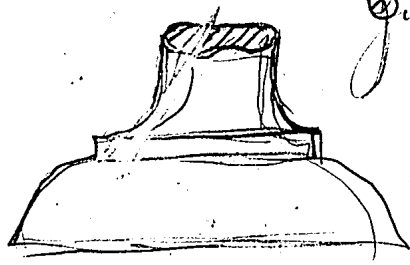
Drawing plate

June 4 1881

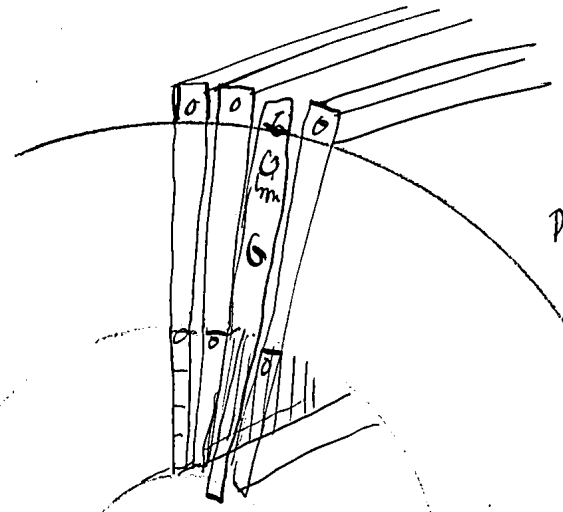
TAE



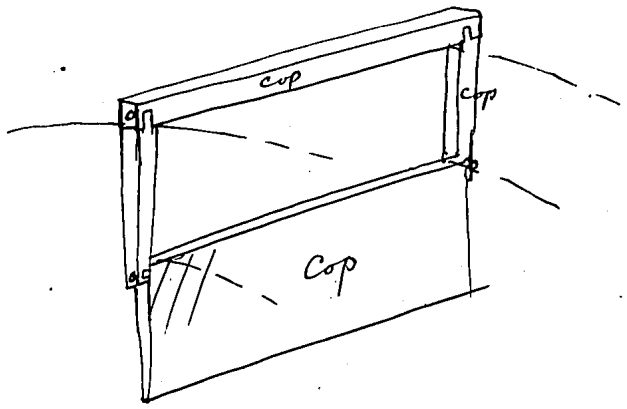
Witness
S. D. Mott



1551 1588 1581 1588



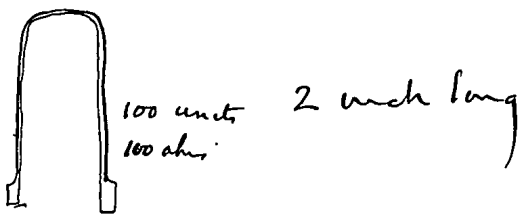
Patent
June 6 1881
J.E

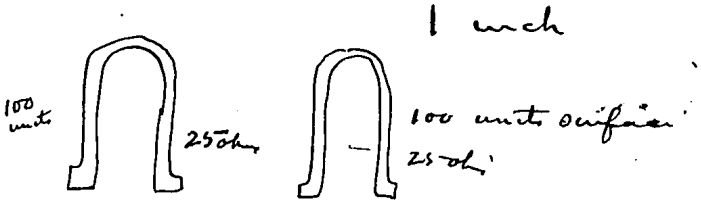


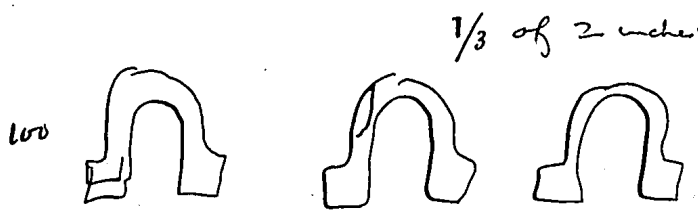
DYER & WILBER,
American and Foreign Patents and Patent Causes. } 519 7th St., Washington, D. C., and 65 Fifth Avenue, New York.

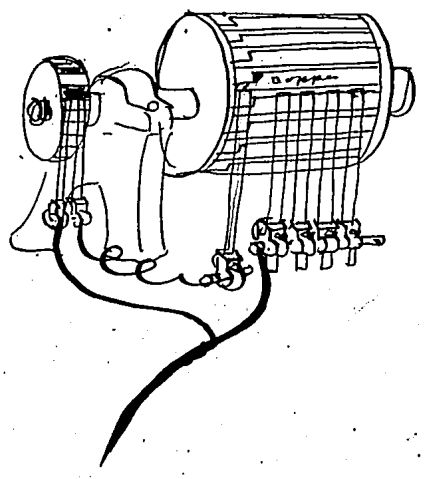
Z. F. WILBER,
No. 65 FIFTH AVENUE,

New York, June 16 1881









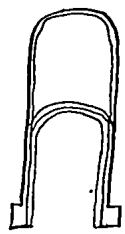
New York
July 2 1881
Witness
S. D. Mott

DYER & WILBER,
American and Foreign Patents and Patent Causes. } 519 7th St., Washington, D. C., and 65 Fifth Avenue, New York.

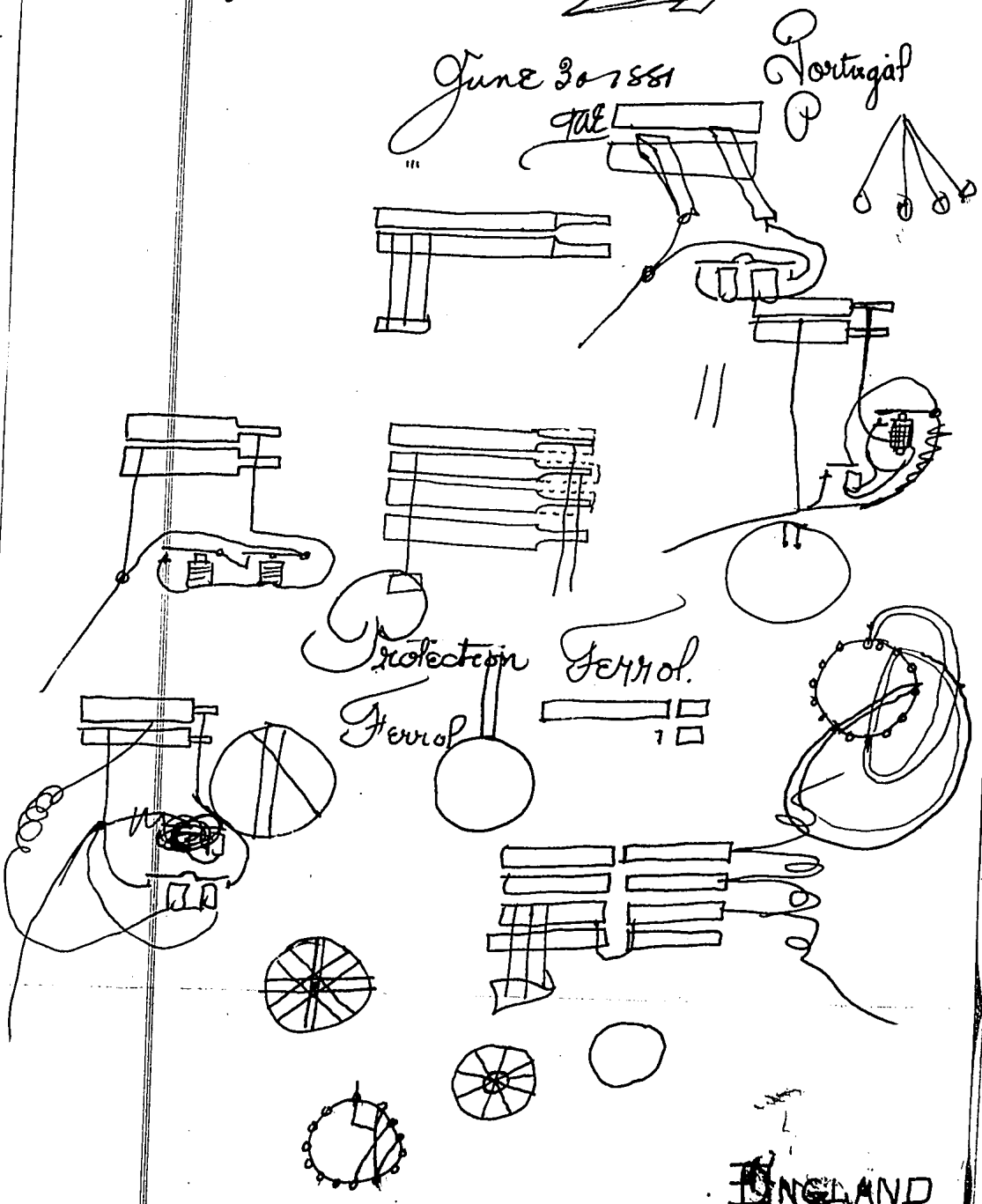
Z. F. WILBER,

No. 65 FIFTH AVENUE,

New York, _____ *188*



Object do away with the spark on a Dynamo Machine,



1881 Patent

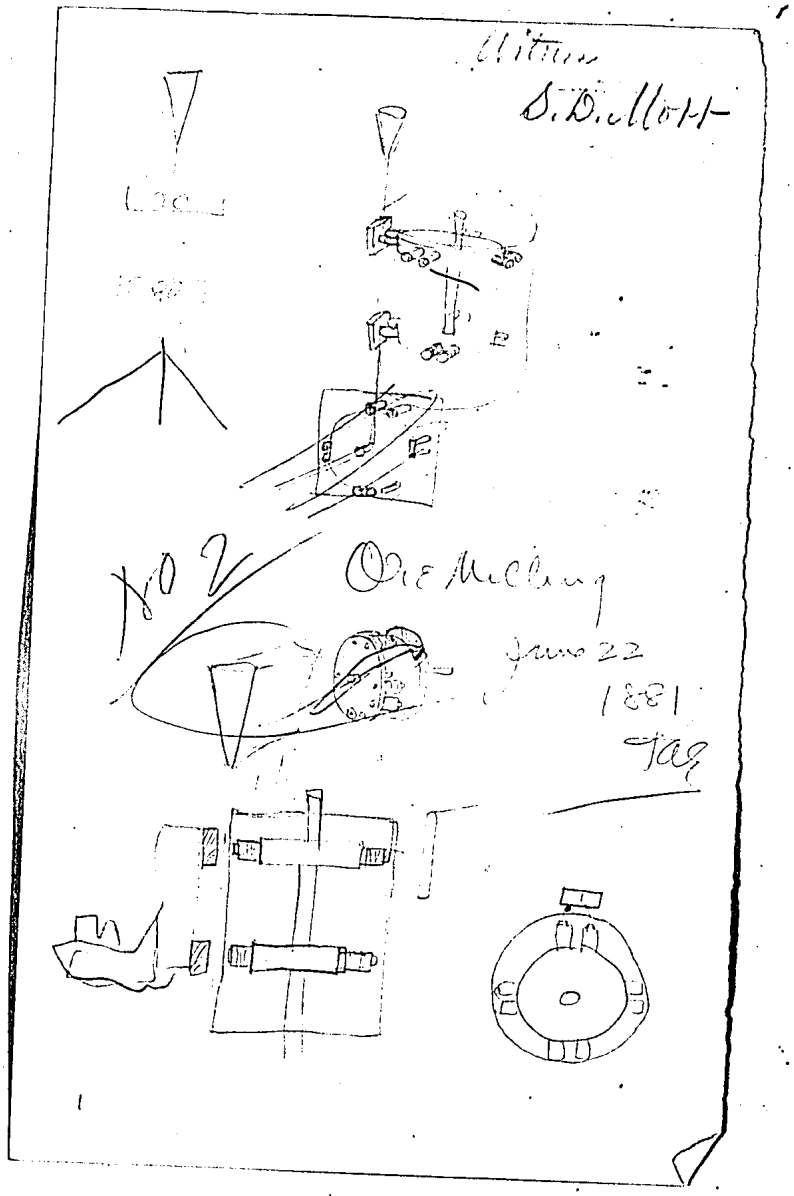
11

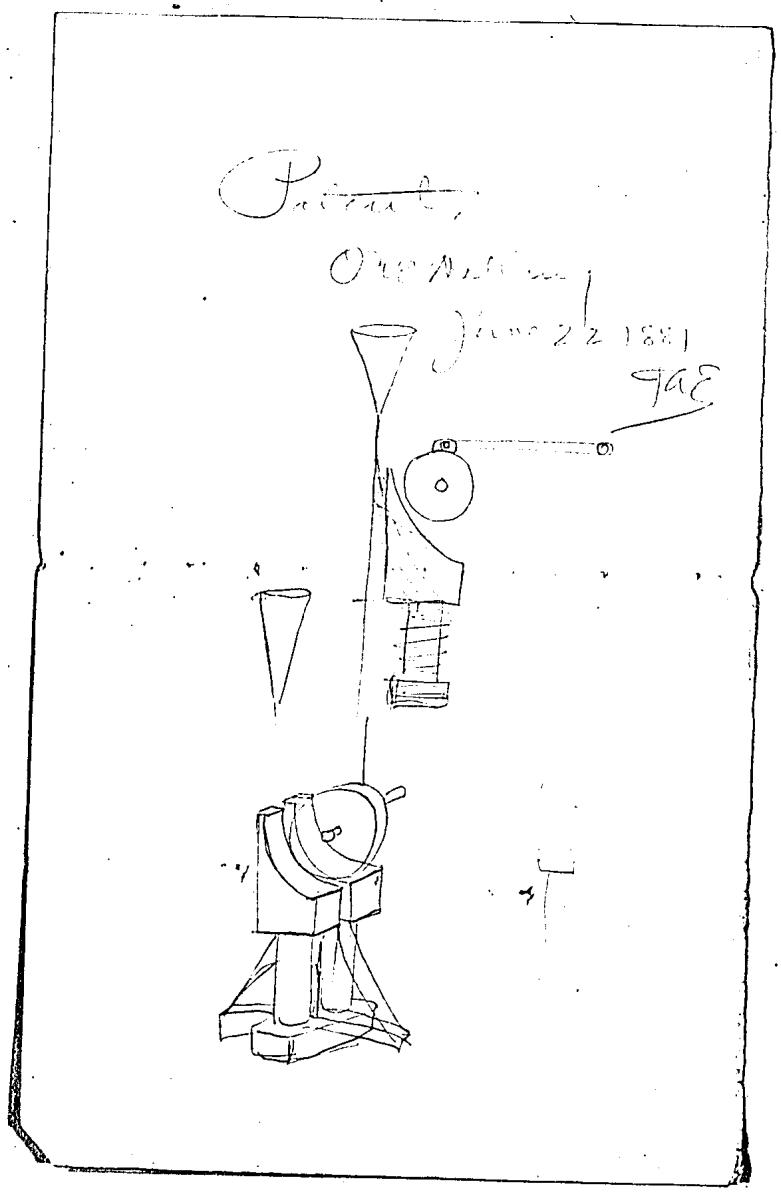
June 22 1881

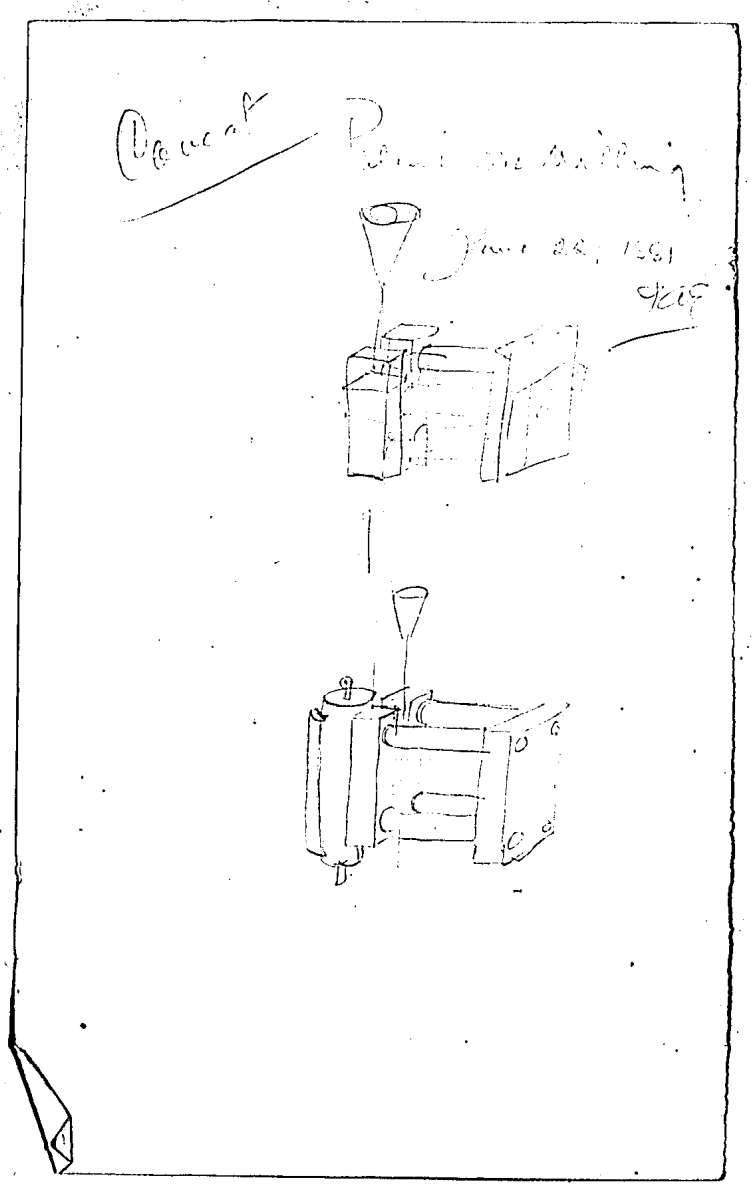
Patent

S. B. Mott

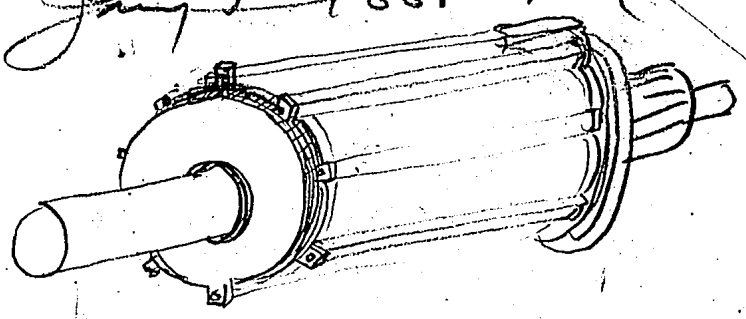
No 1

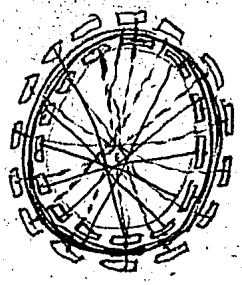

Clifton
S. D. Mott
No 2
Drawing
June 22
1881



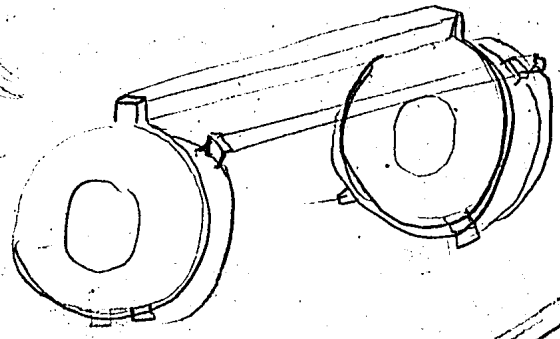


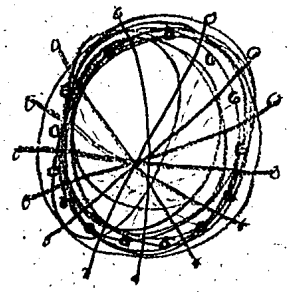
Patent
Jany 5 1864



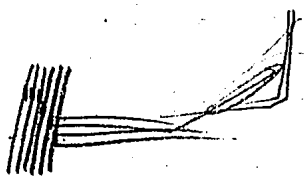


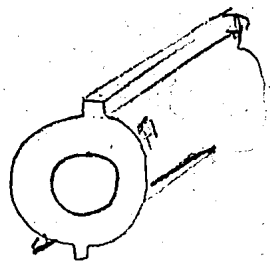
Patent

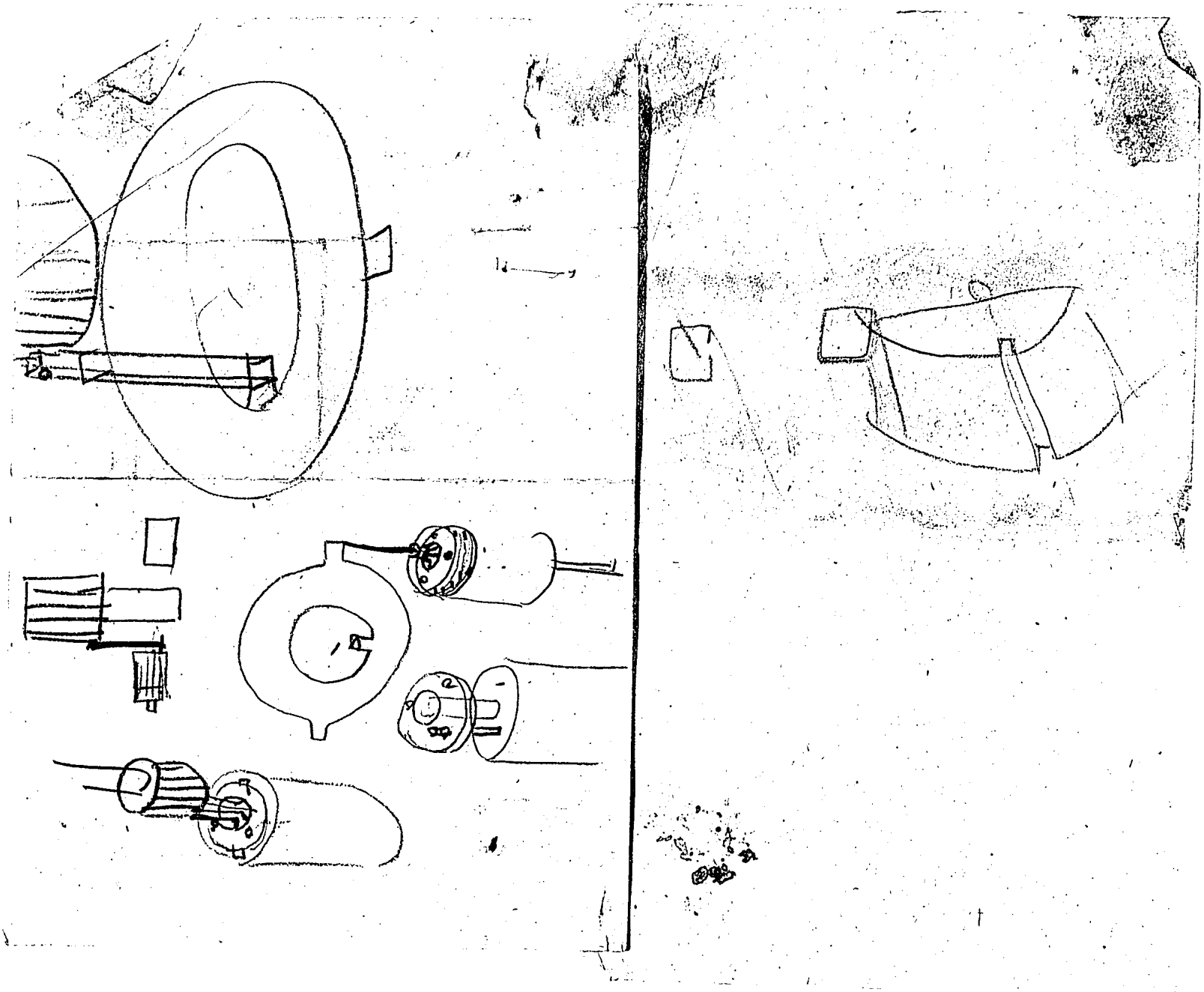




E PLURIBUS UNUM



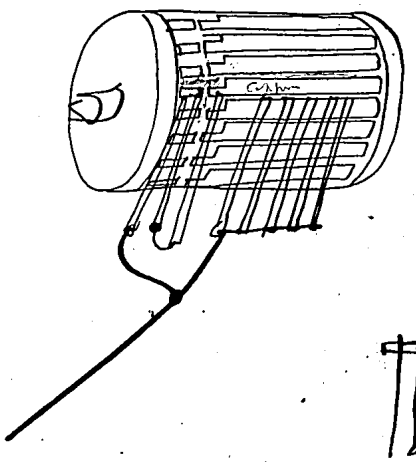


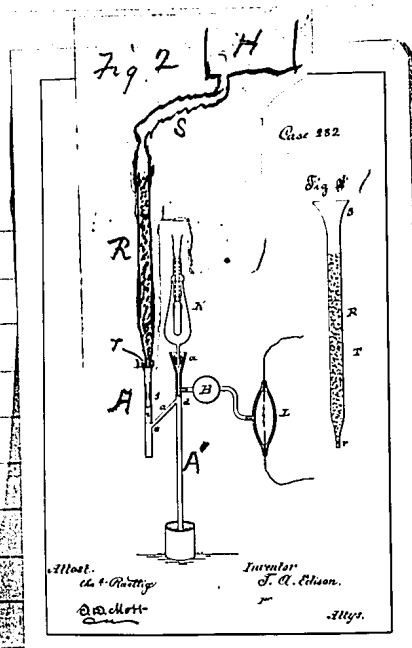


Returned

July 2d 1881

S. D. Mott—

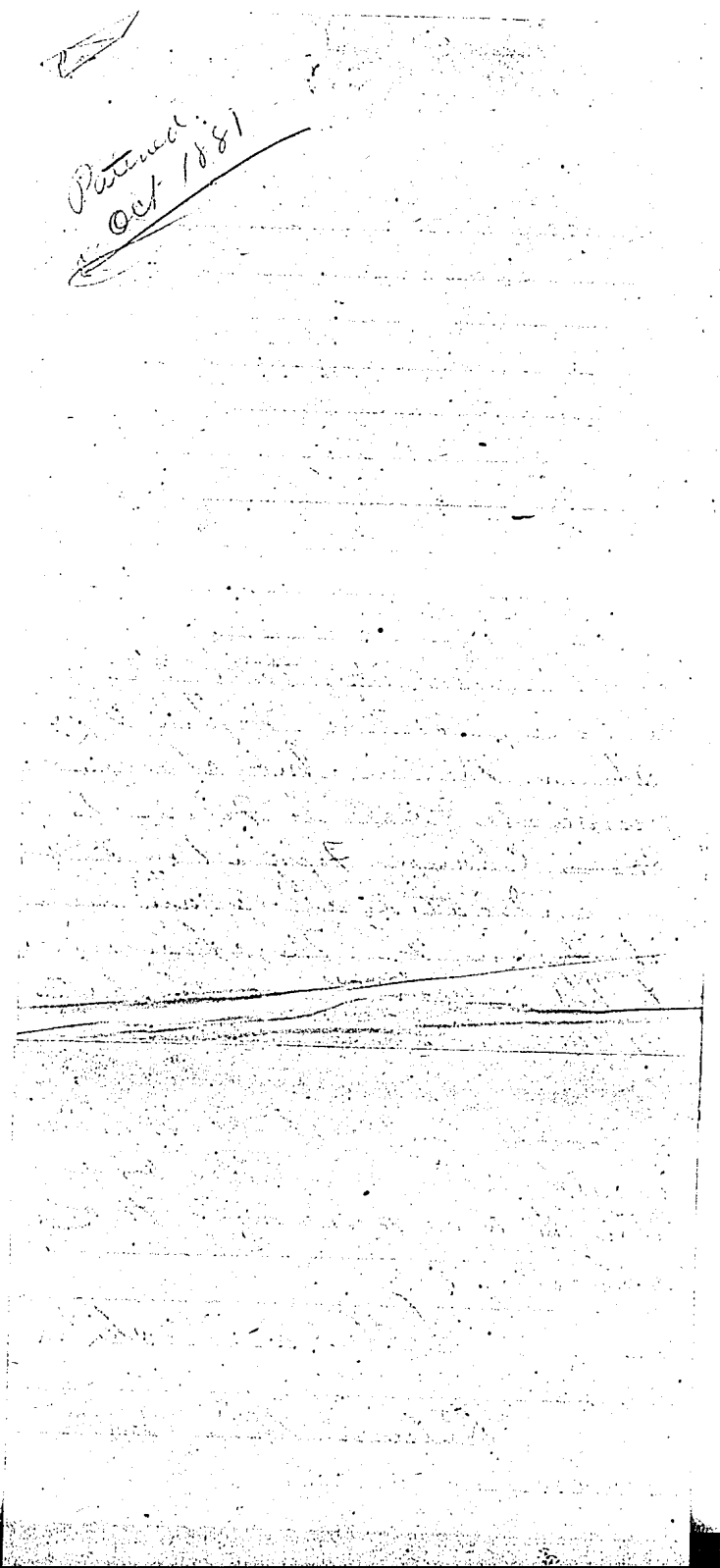




Paul a Jolumn, Take 282 as a base, Make Figure 2 as shown Thereon but change numerals & call it Figure 1. Make Change Figure 1 in 282 as indicated above and make it Figure 2. The change is to have tube R in the path of the mercury, its small end being in the upper end of first drop tube A while the upper is connected by a tube S to a reservoir H of mercury.

Letter a in sketch above.

Return this with Drawing


Patented
Oct 1881

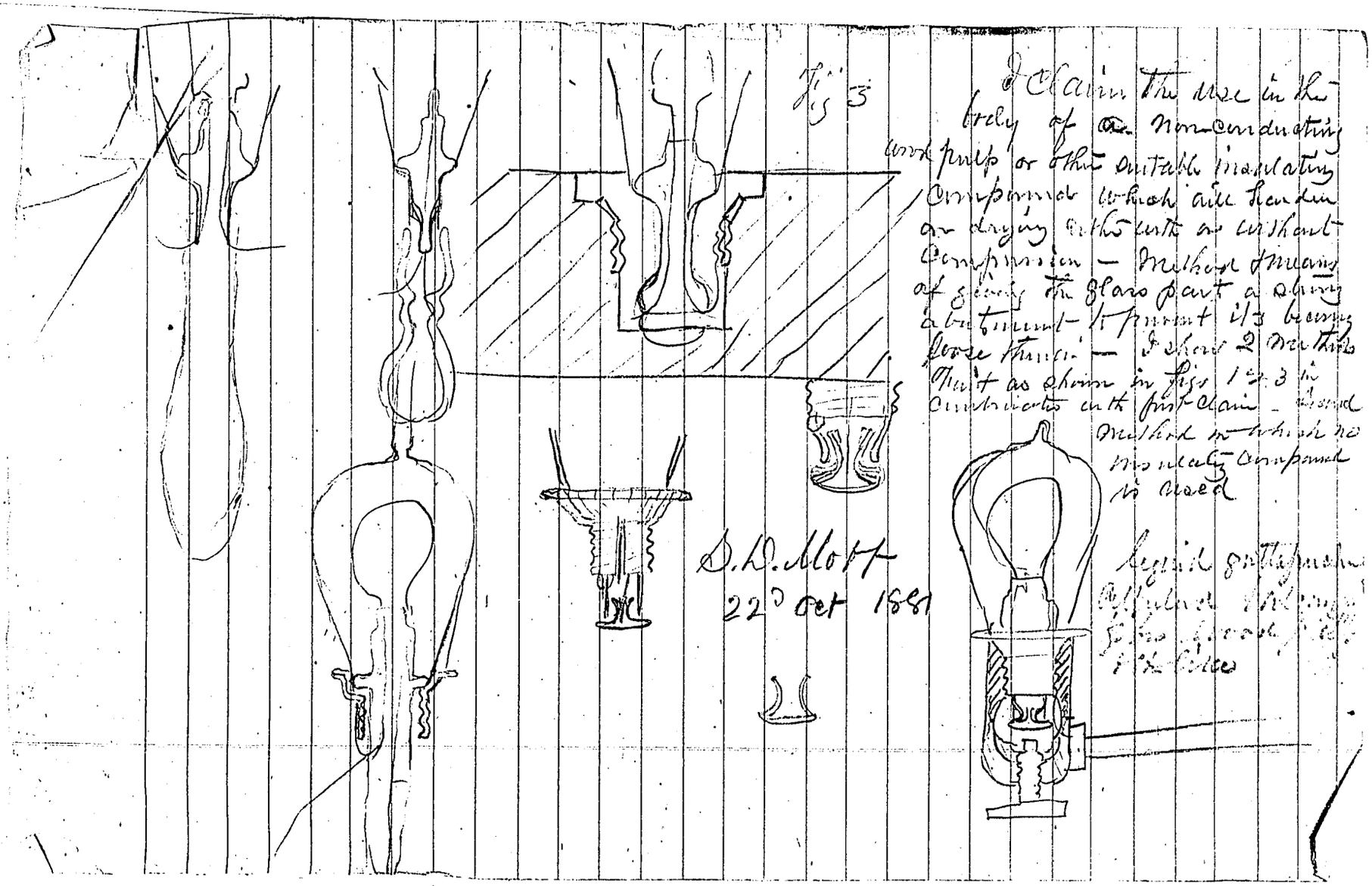


Fig 3

I Claim the use in the body of a Non-conducting wood pulp or other suitable insulating Compound which are heated or dryed without the application of Compression — Method of uniting the Glass part & Oring & bottom — I prefer 1/3 bearing loose thread — I show 2 methods Built as shown in figs 1 & 3 in Combination with first claim — I claim Method in which no Mineral Compound is used

S. D. Mott
22d Oct 1881

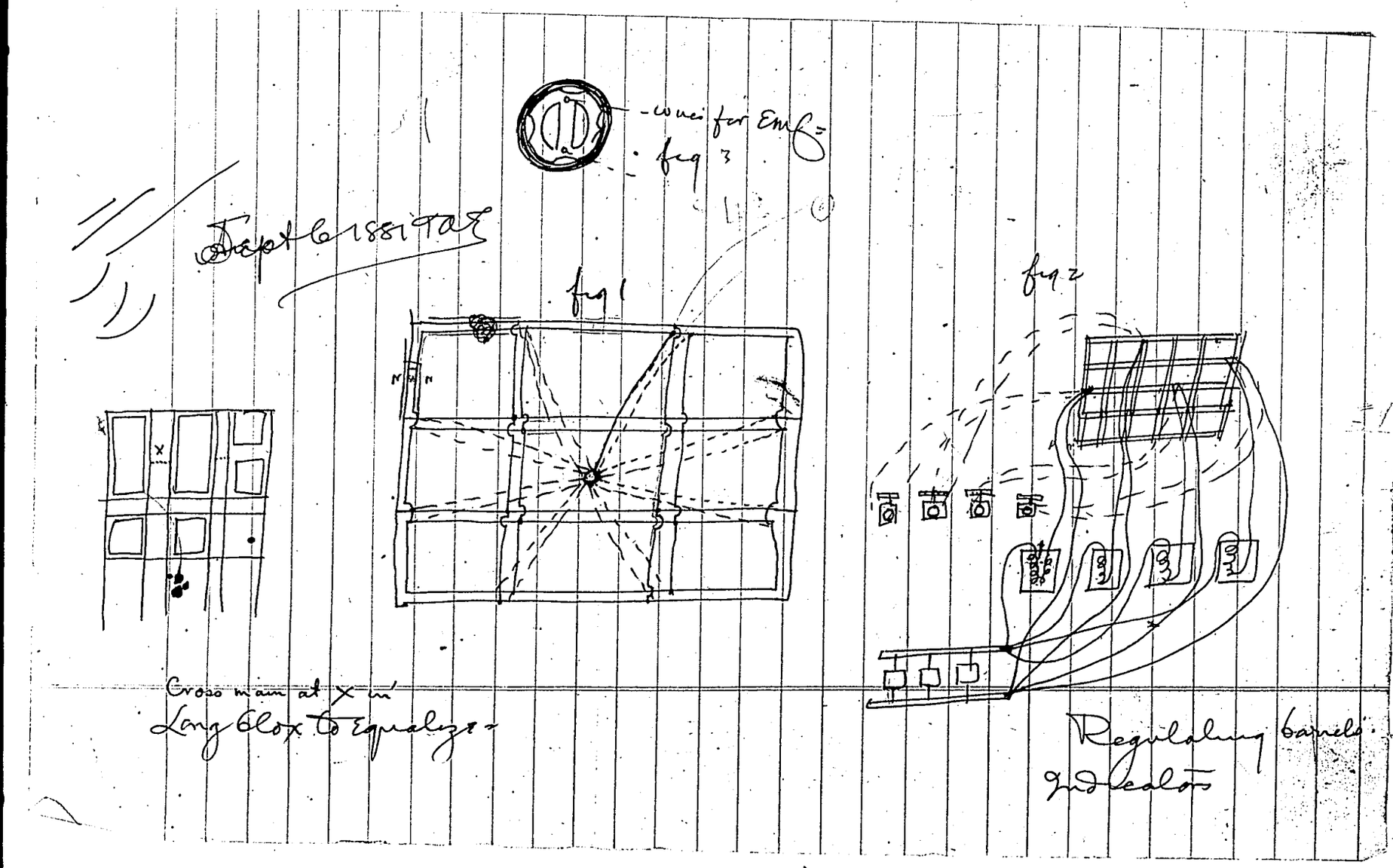
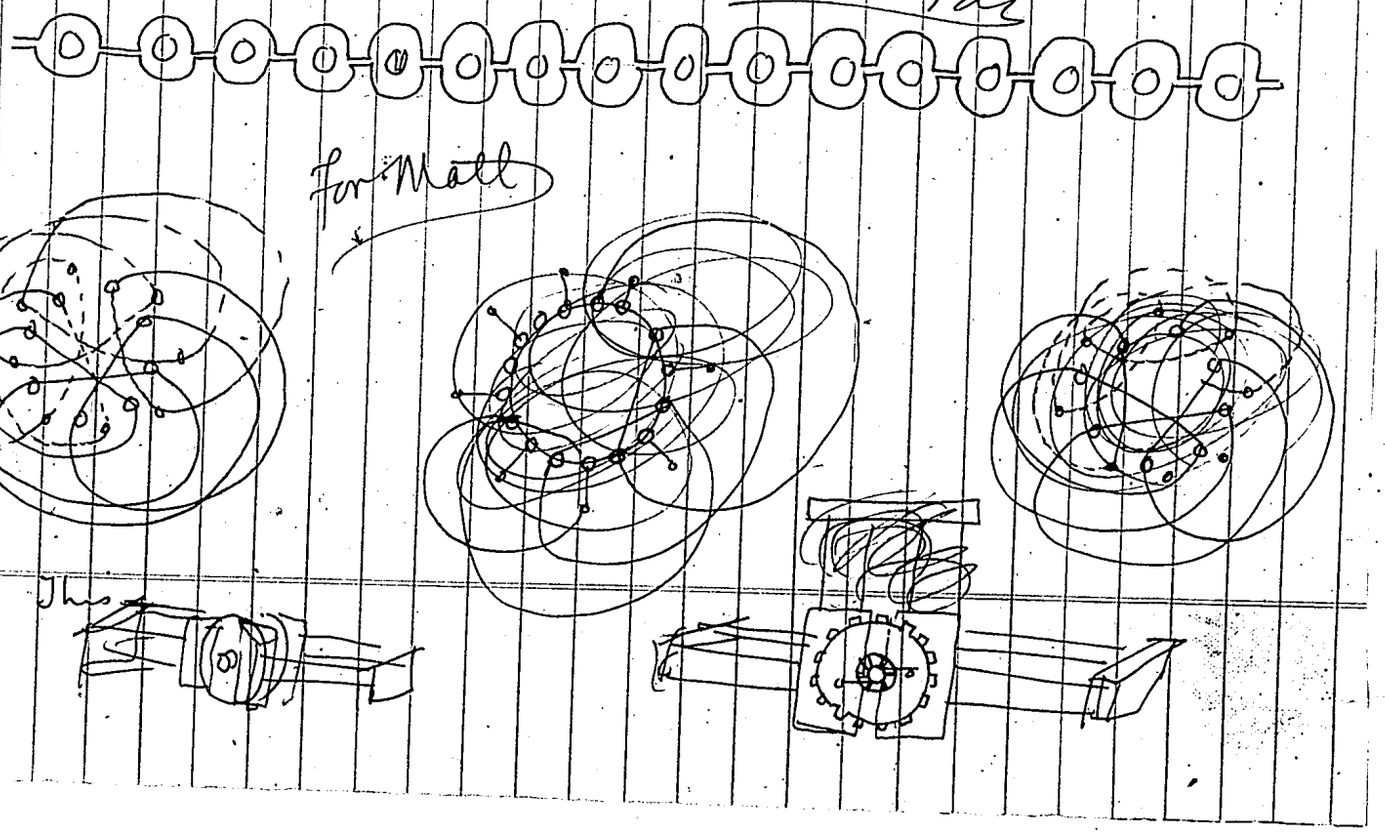
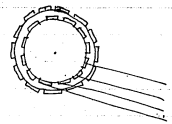

-Wave for Emf=
freq 3
Dept of Electricity
freq 1
freq 2
X
M N
Cross main at X in
Long Flex to Equalizer
Regulating barrel
and lead

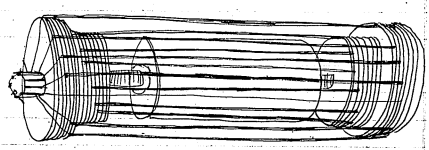
Plate Dynamo Sept 6 1880

Tat



For Matt

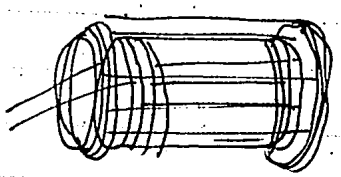


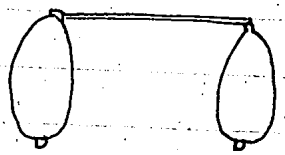


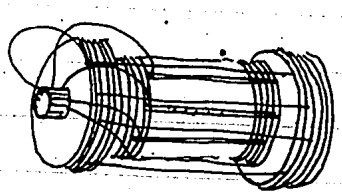
Roller for Dynamo.-

Matt for Patent,

Sept 10 1881 TAE.

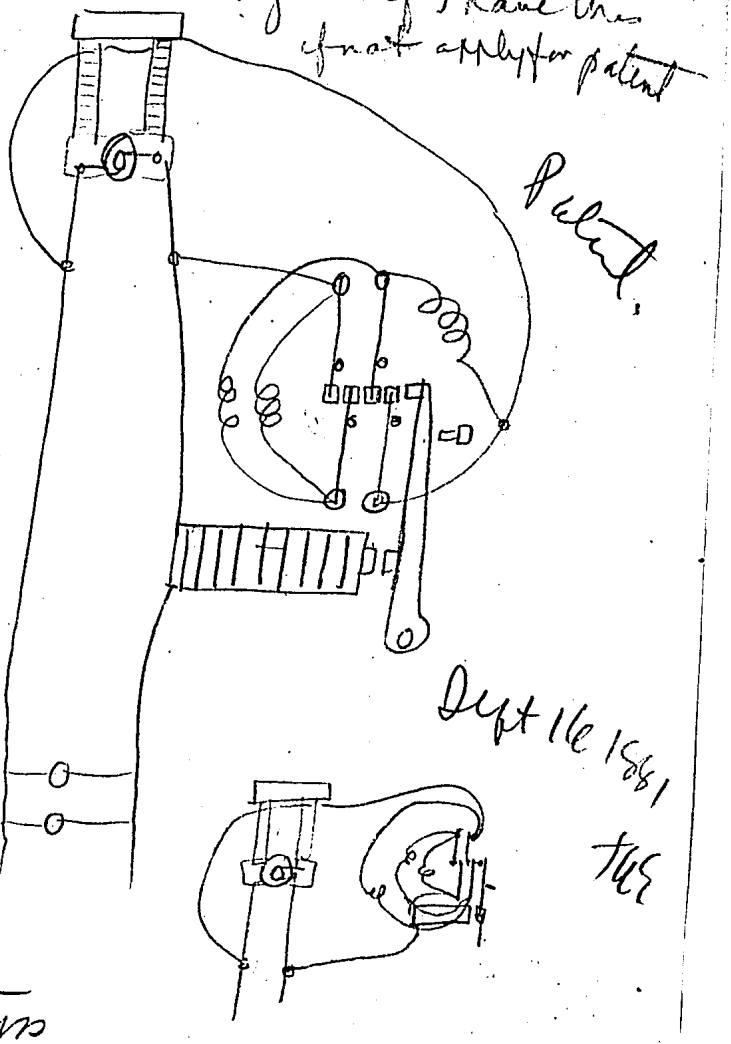


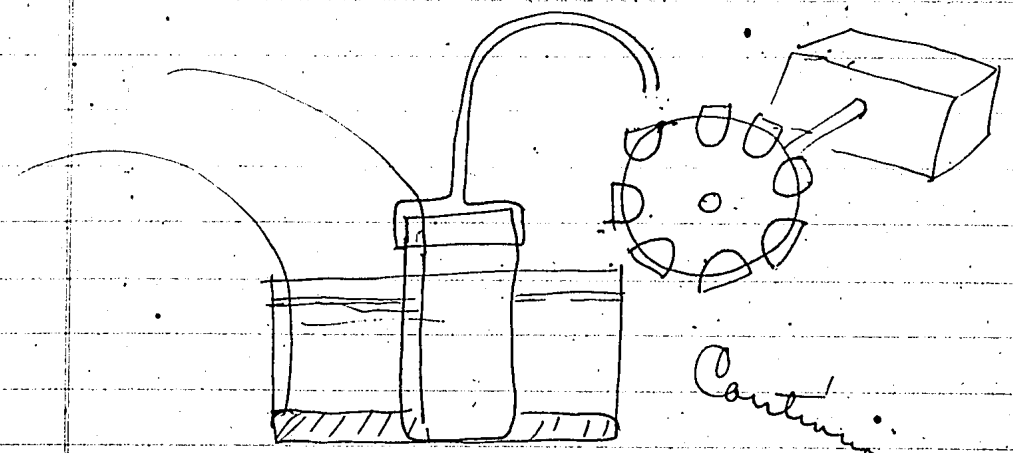




Sept 10 1881

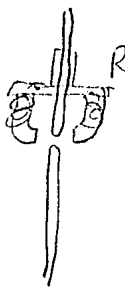
Tag


Dyer see if I have other
if not apply for patent
Dept 16 1881
THE
Witness
S. H. Short



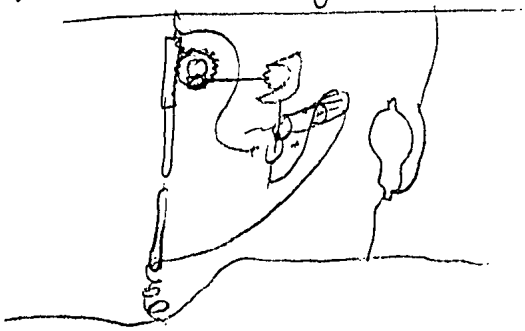
Mercury Melter
Sept 9 1887

Sept 17 1881 T A Edison

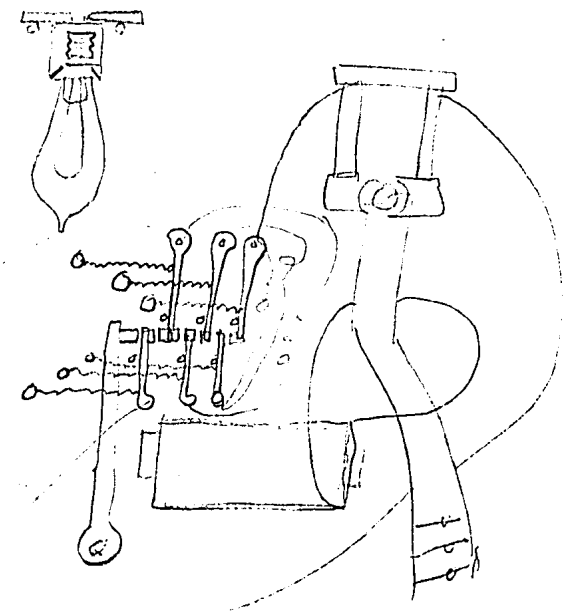


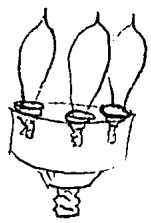
Revolve a magnet around the carbon so that the arc will revolve under the carbon —

Put a lot of regulator lamps with continuous feed in Multiple arc

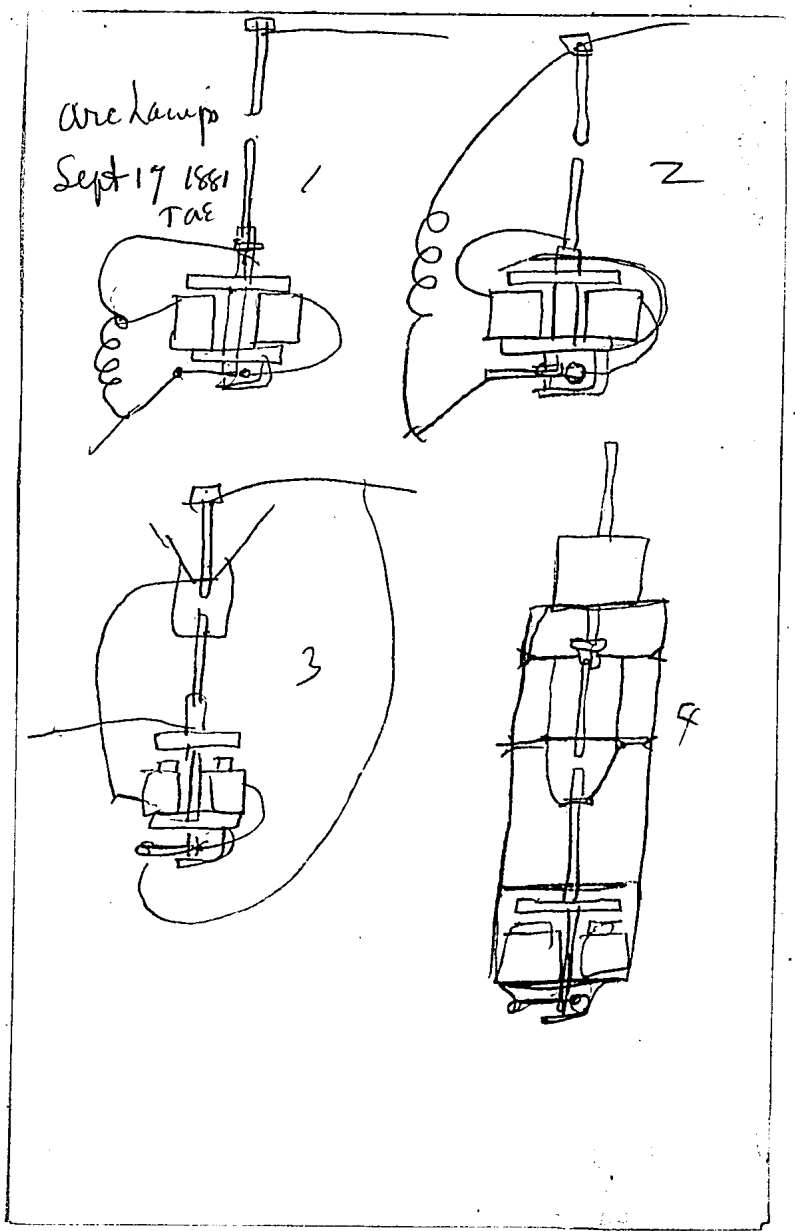


Sept 17 1881 7 a.m.

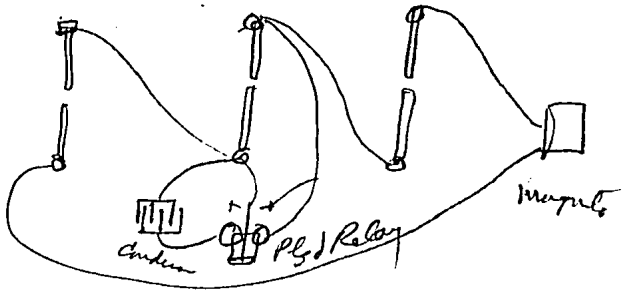


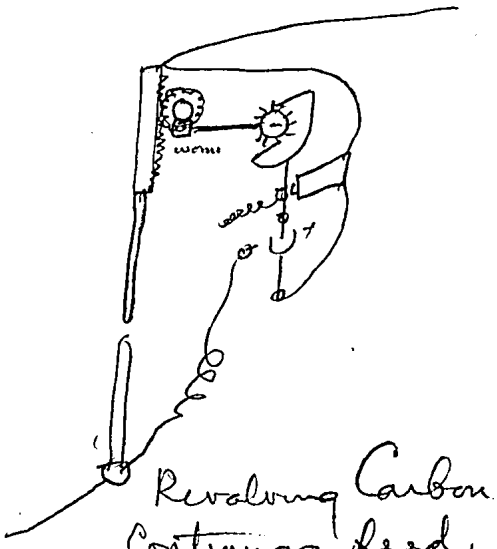


3 socket in Large Socket

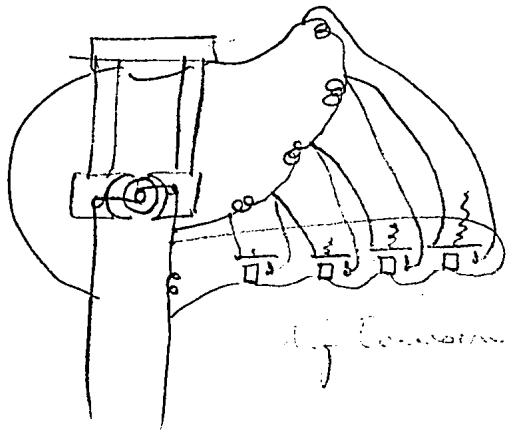

Arc Lamps
Sept 17 1881
TAE
1
2
3
4

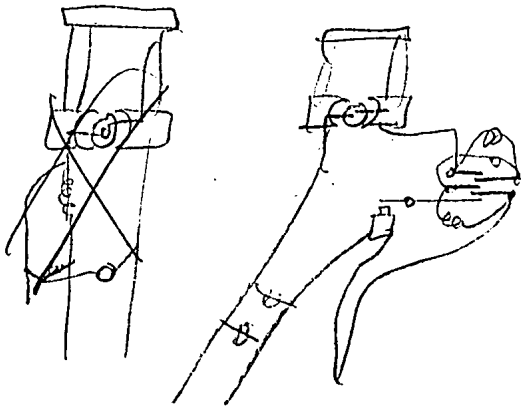
Sept 17 1881 Jablochkoff arc lamps





Revolving Carbon
Continuous feed.



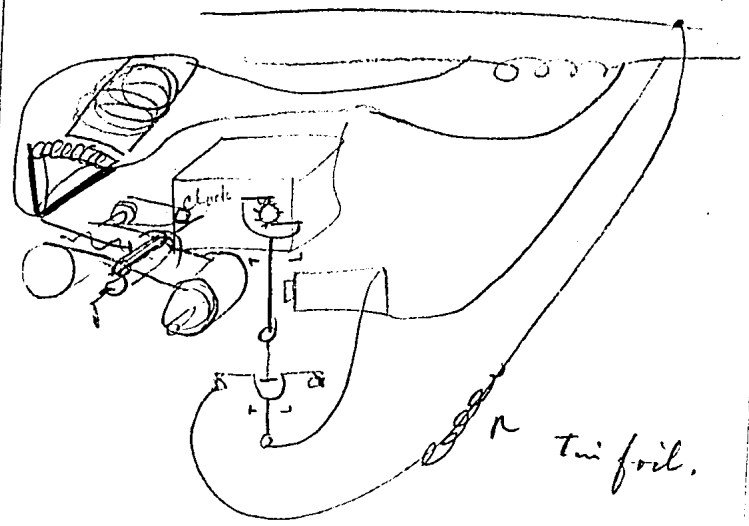


OK

Automatic Regulator

Sept 17 1951 TAE

Metn Sept 17/1881 Tel



R Tin foil.

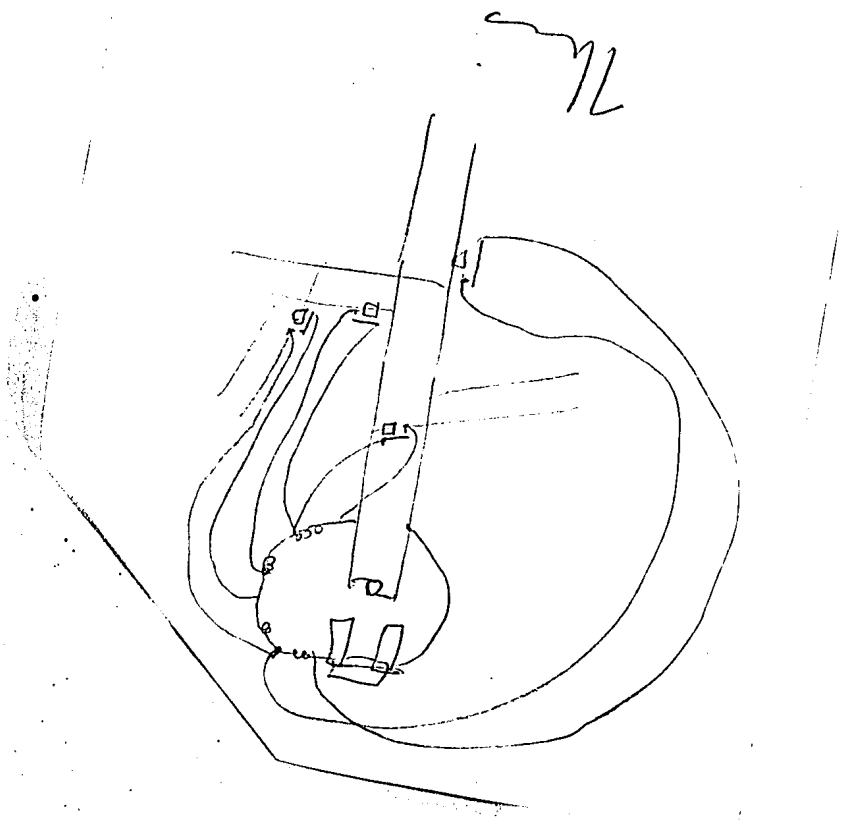
Cercle - alternation of Current of Coil of

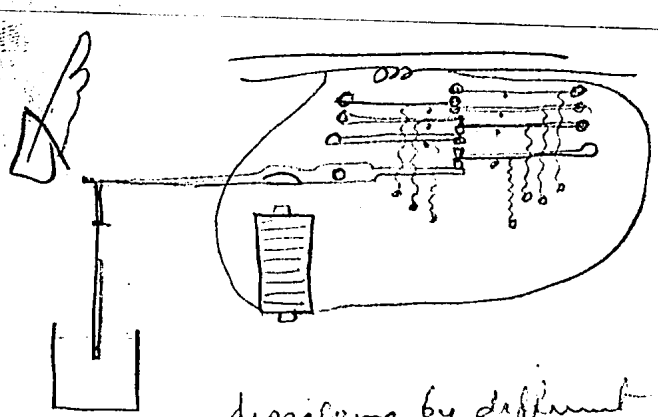
OFFICE OF

Edison Machine Works,

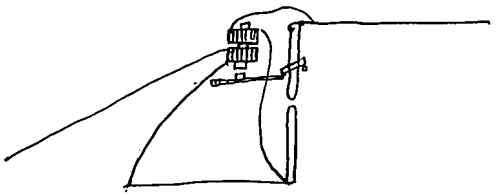
104 Goerck Street,

New York, ... 188

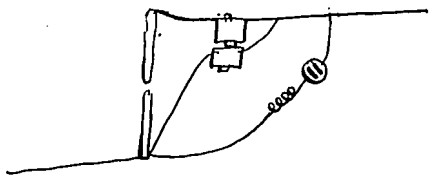




dissolving by different
immersions – Silver in
Cyanide or Copper in
cyanide of Copper or
[illegible]

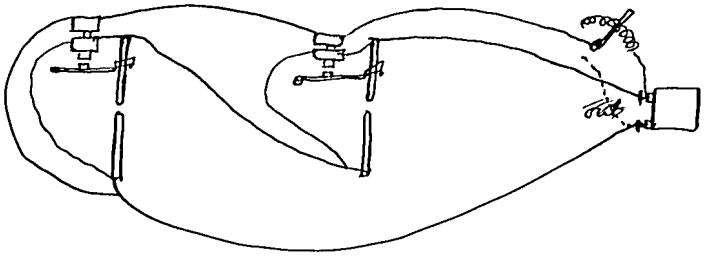


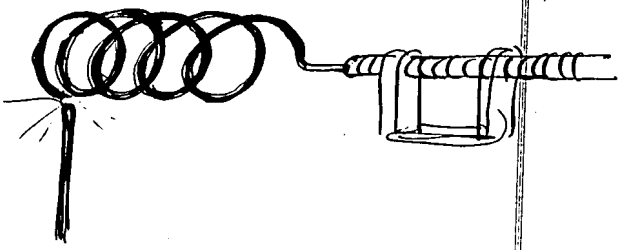
Hy m 2nd Ry Cat

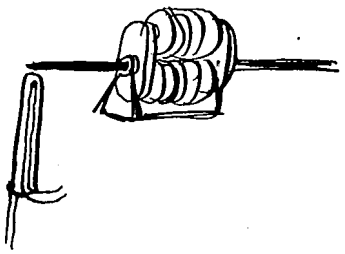


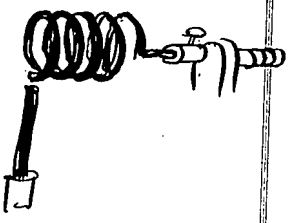
Sept 28 1881

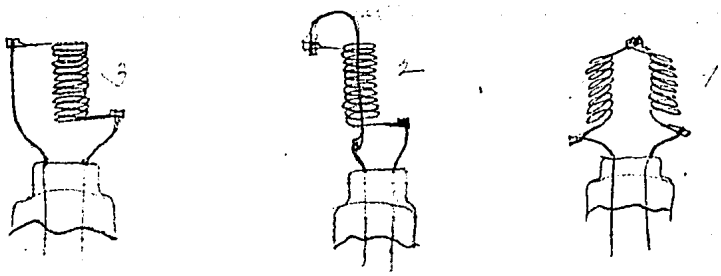
Tag



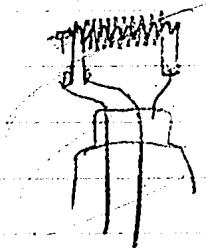






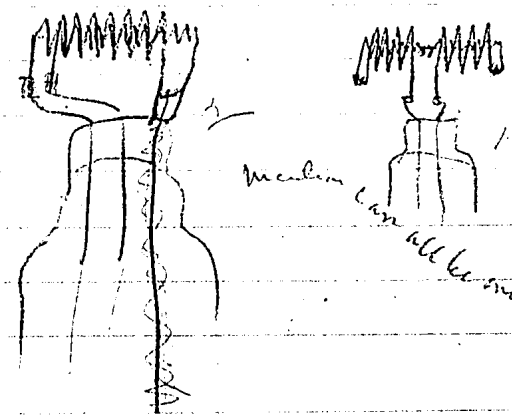


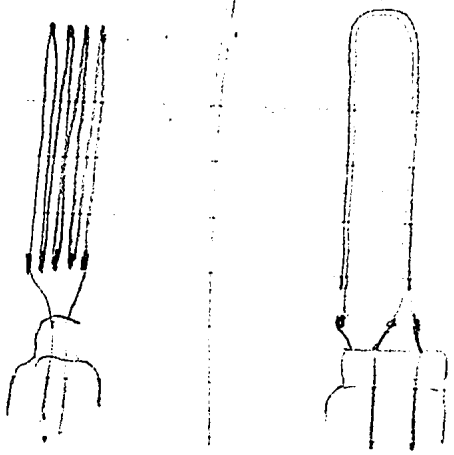
Claim Vertical Coil – Coils arranged to form arch. 2 coils placed together. ~~Coil~~
Coil with conductor of carbon rising through centre
A spool formed of wood or woody fibre material with threaded ends. Coils of carbonised thread in a spiral form wound by placing
~~Above~~



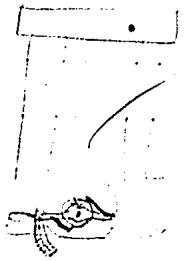
~~Arch~~ of Coil

Nov 2005

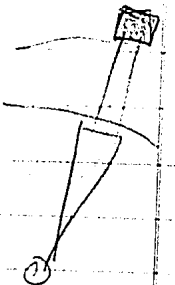


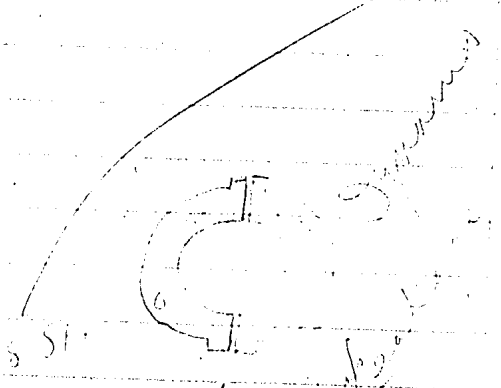


Mercury in this case
that separation produced
by the failure of an earthy
oxide.

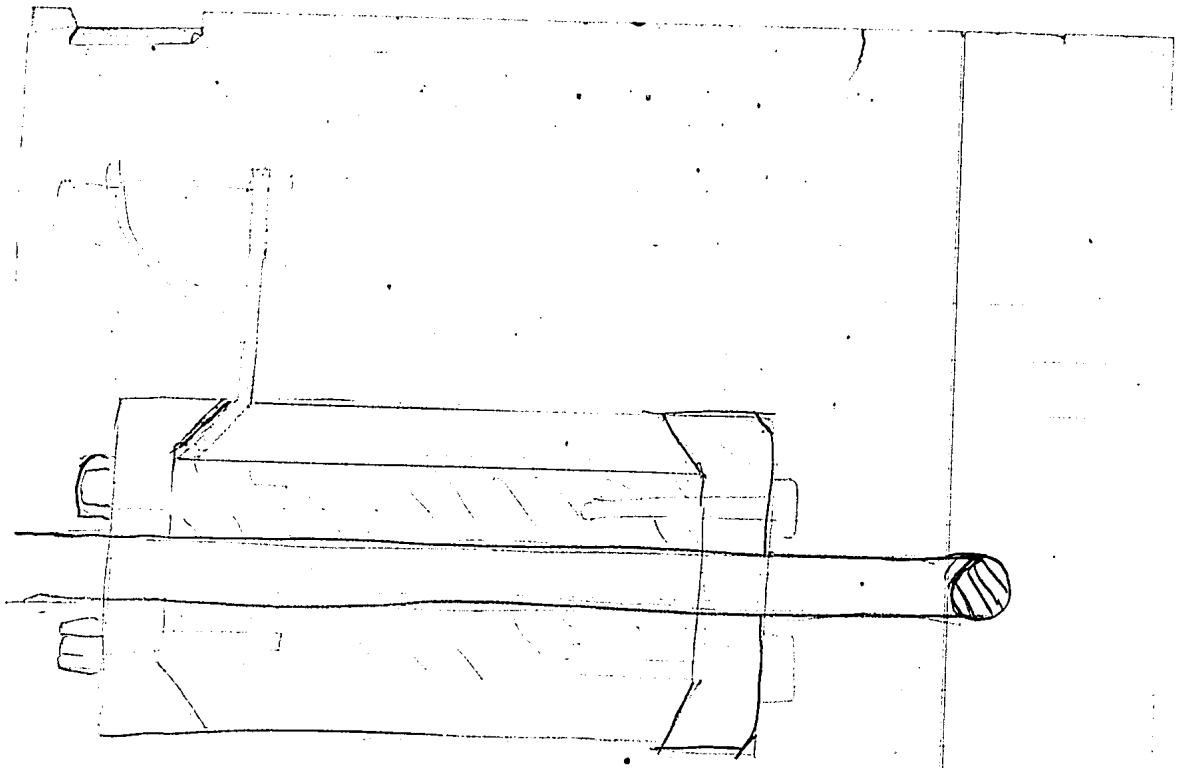


in connection with
indicator of condition
or [illegible]

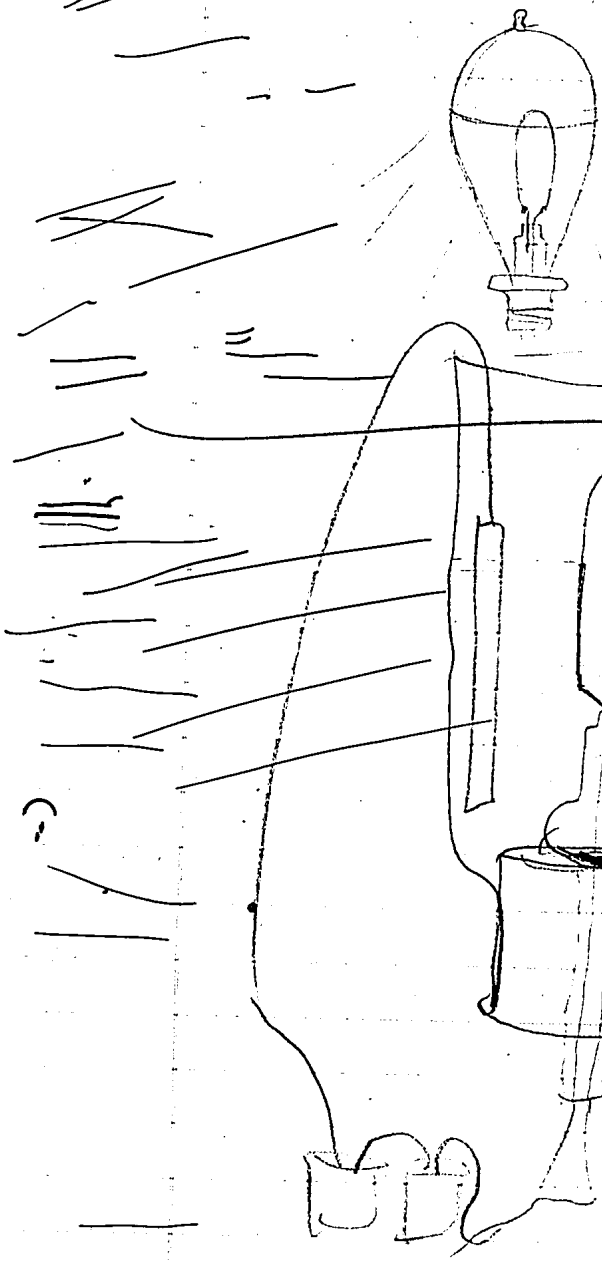




This



Patent.



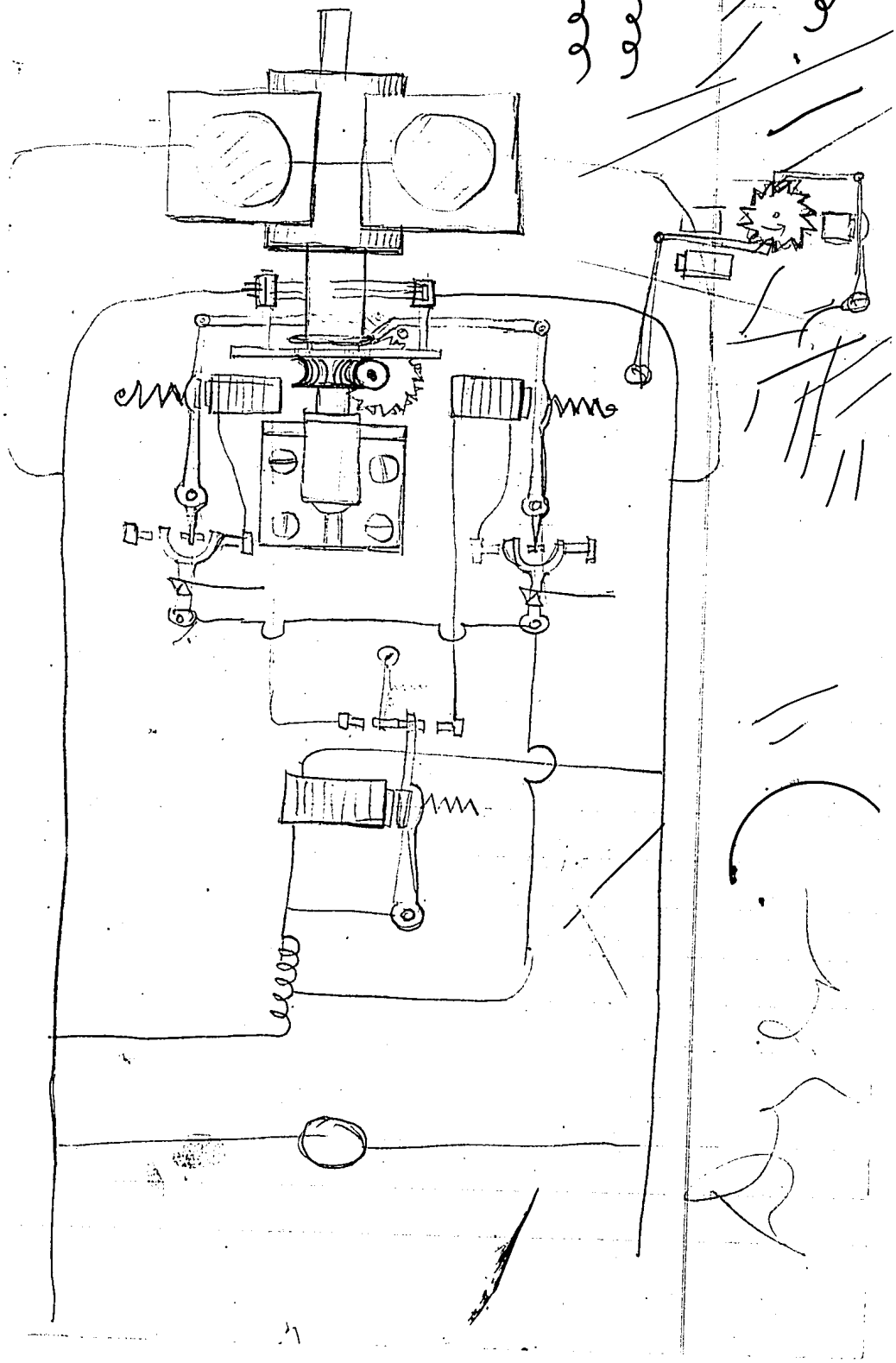
Silvered or ground

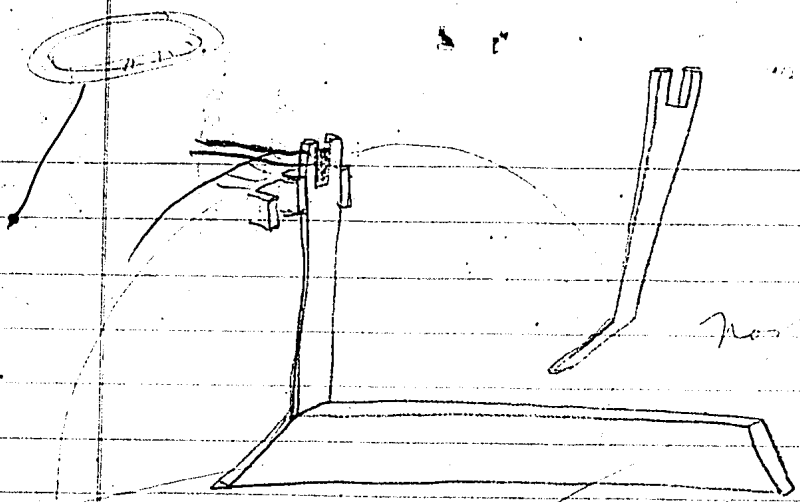
Patent

Method of making filament of Carbon and carbonizing same

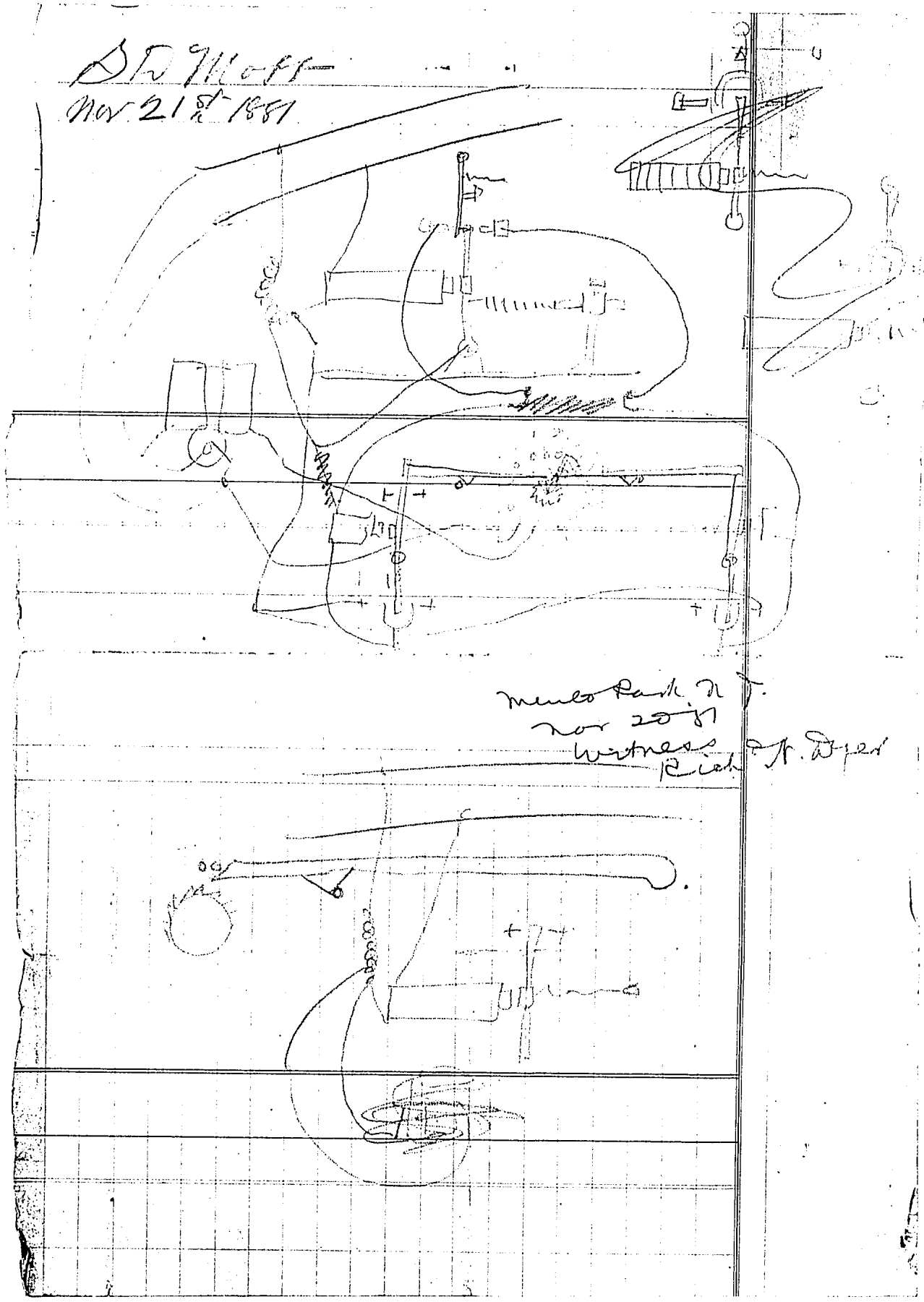
Witness

S. D. Mott



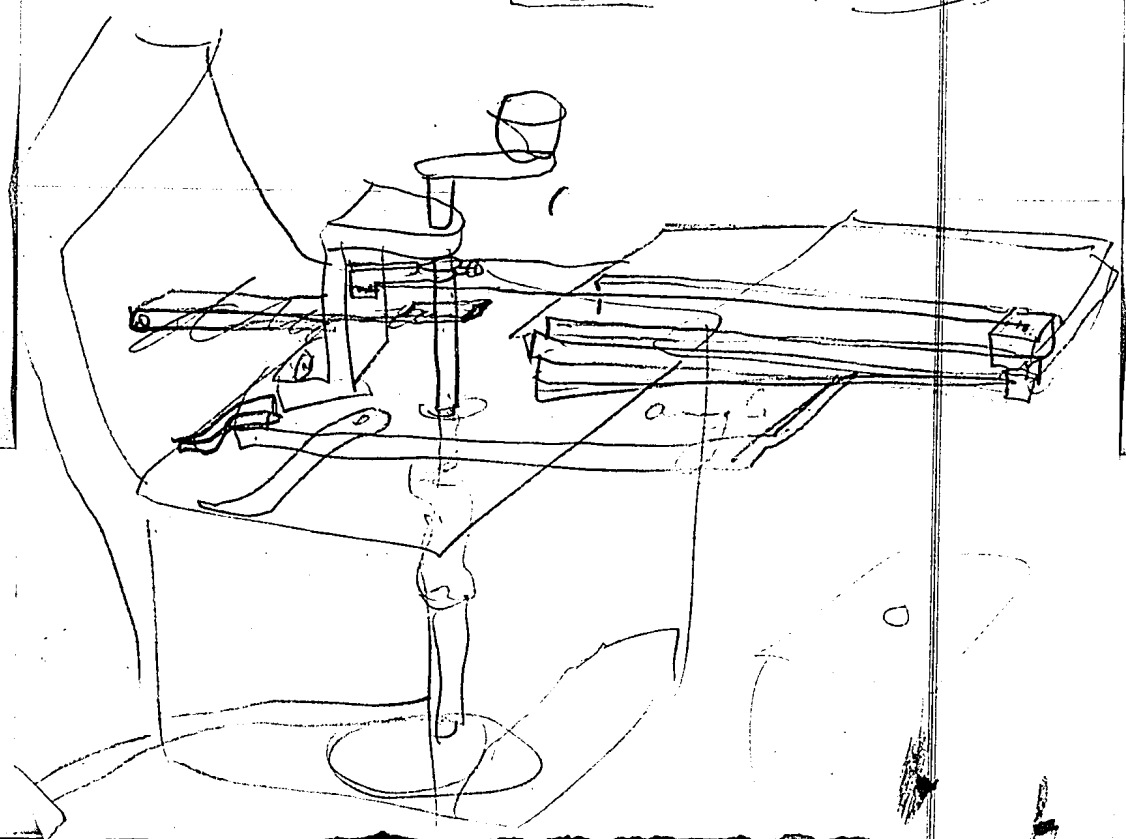


Commutateur 2 dynamo


Menlo Park N J.
Nov 20 87
Witness
Richard N. Dyer

Wilkens

Dec 19 1981



317

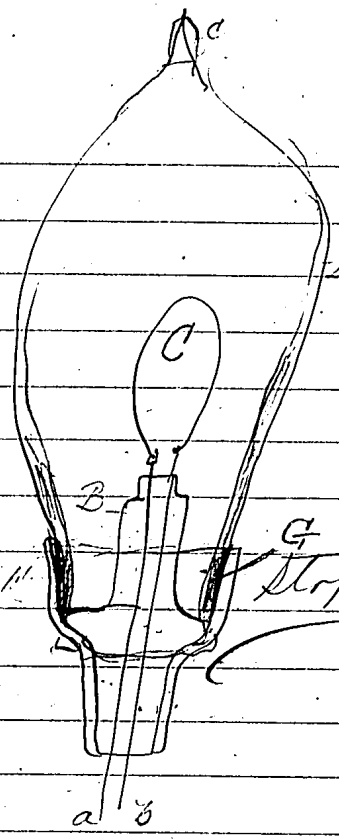


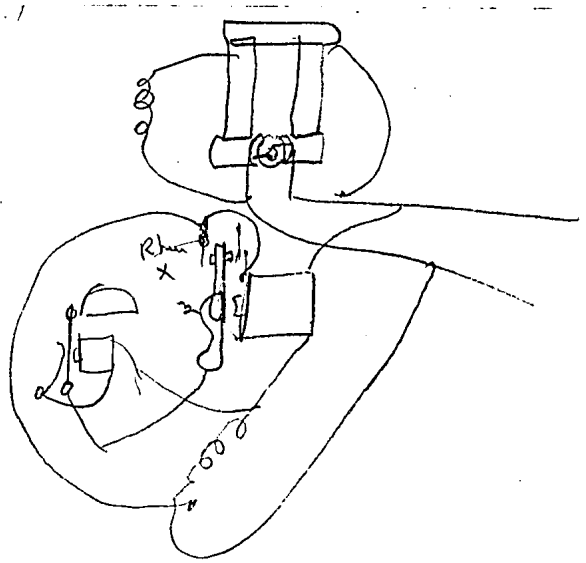
Fig 2

Stopper

Watkins

S. D. Mork

X2



R at x to make bell weaken when lights low + ring when lights high -

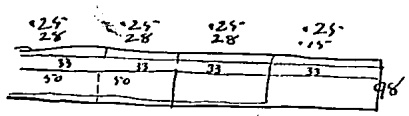
The Edison Electric Light Company,

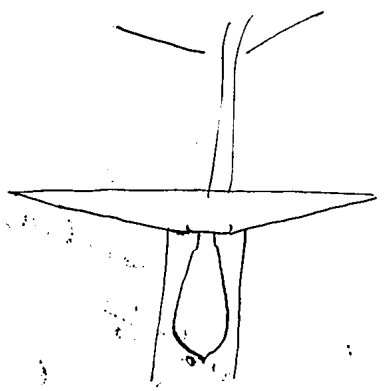
65 Fifth Avenue,

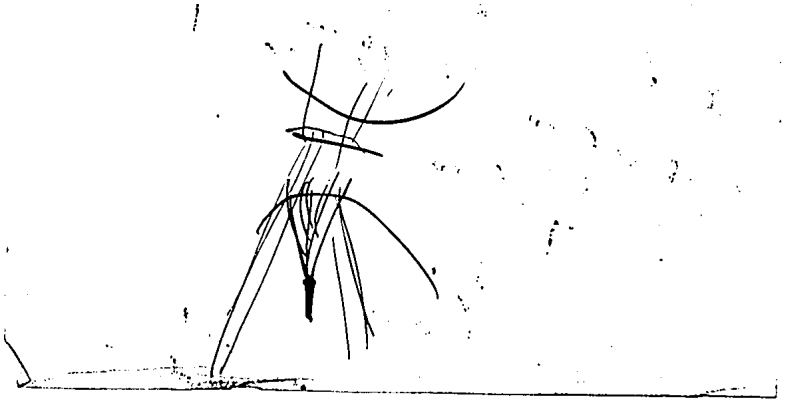
28 / 3 / 84 — 27 / 4 / 8

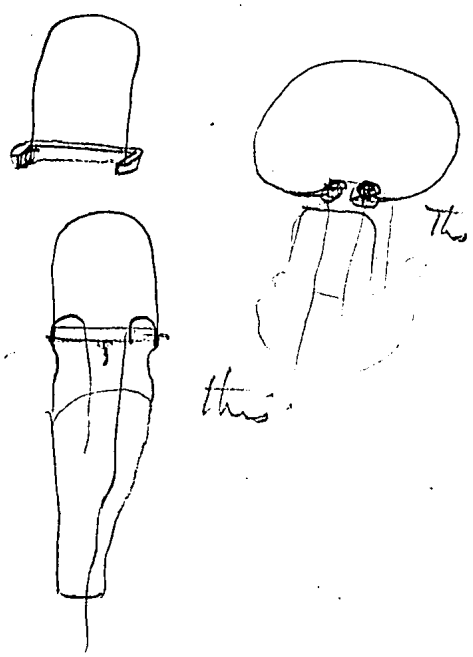
New York, ... 188

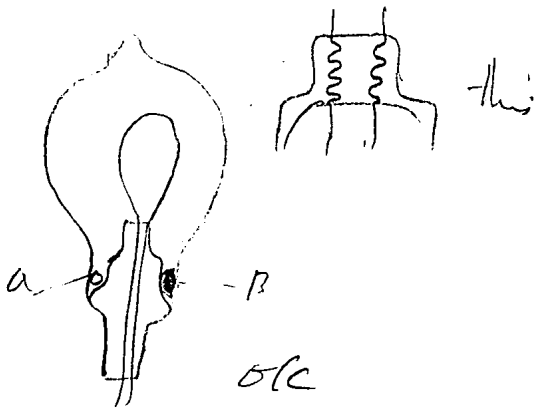
Norvin Green, Pres.
S. B. Eaton, Vice.-Pres.
E. P. Fabbri, Treas.
C. Goddard, Sec'y.









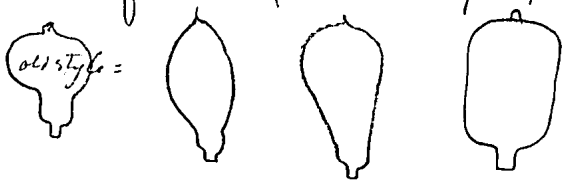


O/C

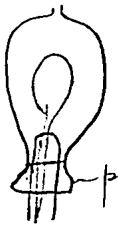
a pumice soaked in Naphthaline,
B Cocoanut charcoal to absorb Hydrogen.

~~Section of platinum bearing~~

Section of coated discharge electrode



Claim nickel ~~platinum~~ palladium, gold plated copper or iron wires for sealing in glass =



plaster paris seal coated with gutta percha -

also cement composed of anhydrous phosphoric acid in fine powder & Caustic Lime, fresh burnt. put in a dry state in layers & moistened at boundary when another layer

Basic to my thesis,
2183
5879 -
2181
2182
Roughan made glass by fluoric.
also made part pour the Cementin
also glycerine mixed with glue,
Matter Sulphur -
glue water oxide zinc
2204.
2213
2238.
Lawson to Keep on Trying deposit
Silicon also, Zirconium by
Electro Gem - See Gore Phil
magazine -

See if my Electric R.R. has been
in application in office for not
make application = NO = make
drawing
Entry
See about Rowland application
& Cabinet,

Eyer will see him following
See Walker about circuiting
attention of office about granting
that Dynamo like Brush when
I had application in, also
punching Carbons filaments from
Carbons See my graphite Case -
About preliminary statement
about Edison Johnson Magnet dont
forget old Domestic Magneto box when I had

Claim end on brushes Explain why.

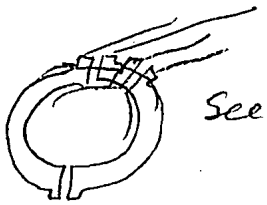
ascertain absolutely if Mica insulation is secured in foreign countries.

Have Kunzi get Matt Blue print of new Safety Catch box for blade carriers.

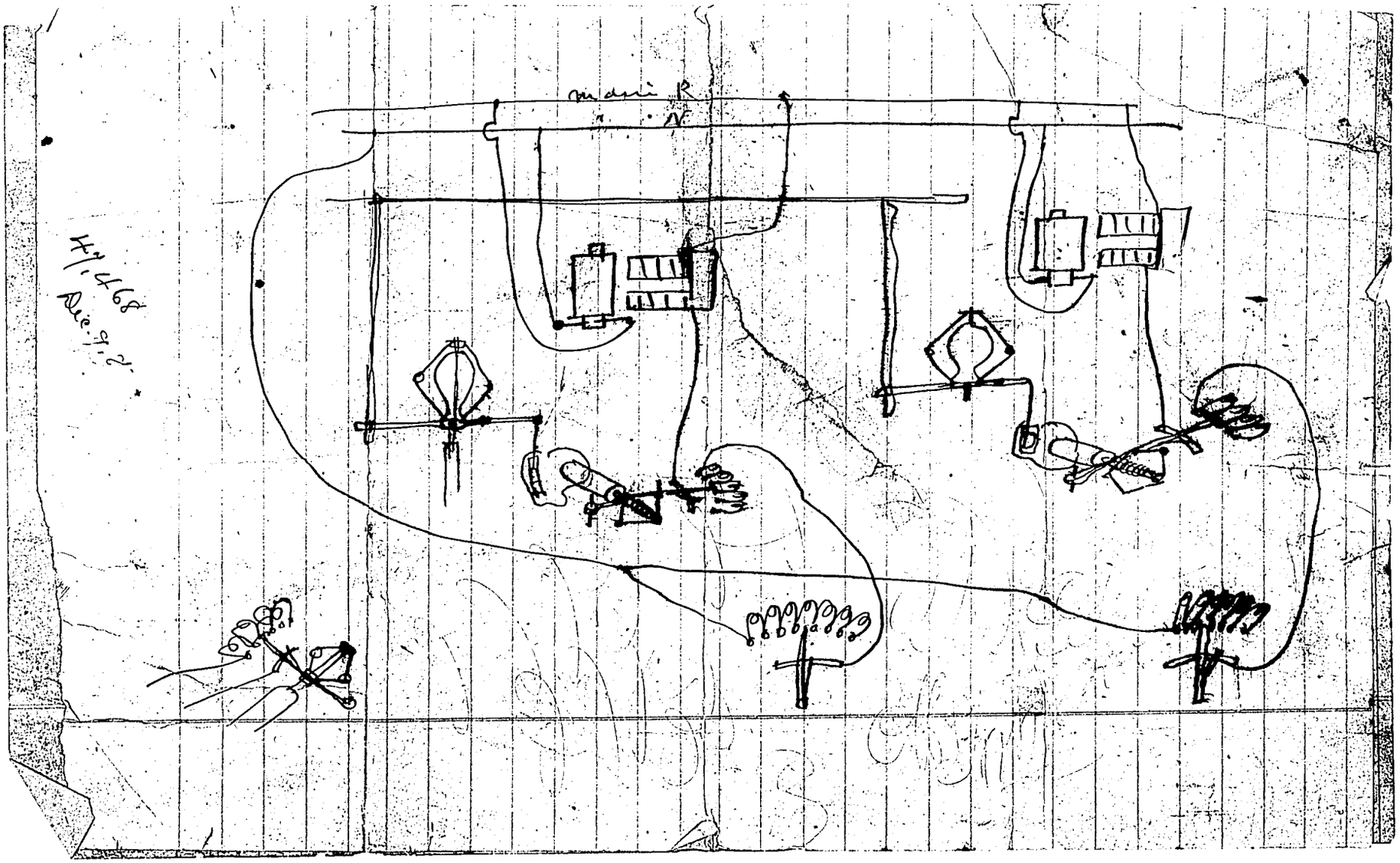
Use of all organic (10) wood fibre is secured for Carbons

Claim a clamp with carbon in it and a setting arrangement of a metal, such as plat gold

(See Drawing)



See fifth o/c



Claim the method of increasing the efficiency economy of a dynamo machine by increasing the power of the field magnets ⓘ use of magnet abnormally large in the present state of the art.

I am not aware of any dynamo machines giving Continuous Currents with armature entirely wound with wire. where there is a single Electro magnet for a field with polar Extensions nearly covering the cylinder; and I am certain there is none with great length of core. The practice is to use two short field magnets quantitized together which does not increase the length but only size. and I have discovered that instead of following this now universal practice, the two fields were arranged so that they were not quantitized but made as one long magnet it would increase the efficiency of the machine as the extending power of the lines of force increase with the length of the magnet and the quantity or number of lines increase with the weight Hence by reversing the common practice I obtain great extending power of the lines of force by length of magnet + to make up the loss in the number of lines of force by increasing the length I at the same time increase its mass - by this means I have obtained machines giving an efficiency of 96 percent